

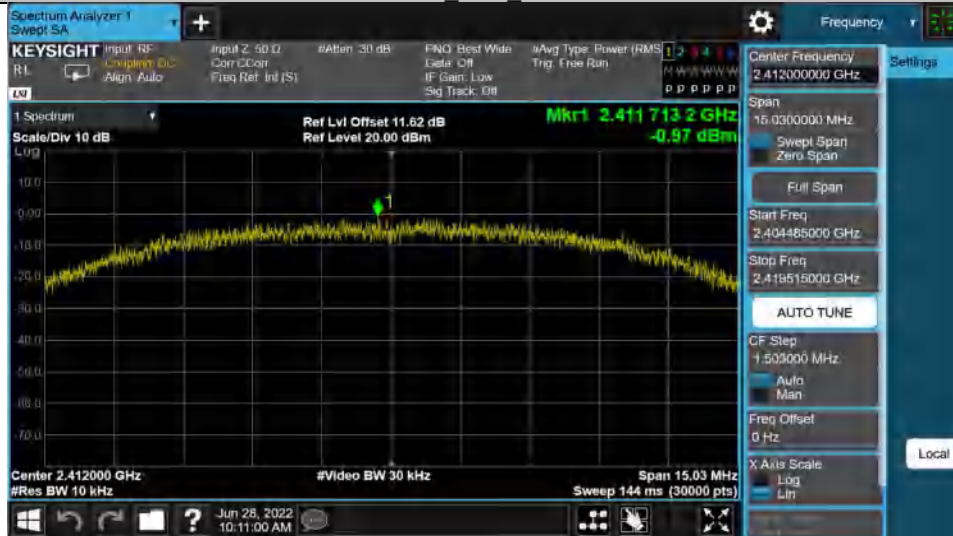
Appendix B: Test Results of Wi-Fi 802.11 b/g/n

APPENDIX B: TEST RESULTS OF WI-FI 802.11 B/G/N	1
APPENDIX B.1: TEST RESULTS OF CONDUCTED POWER SPECTRAL DENSITY	2
APPENDIX B.2: TEST RESULTS OF 6DB BANDWIDTH.....	7
APPENDIX B.3: TEST RESULTS OF 99% BANDWIDTH.....	12
APPENDIX B.4: TEST RESULTS OF CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 KHz BANDWIDTH.....	17
<i>Conducted Spurious Emission</i>	17
<i>Band Edge</i>	30
APPENDIX B.5: TEST RESULTS OF RADIATED SPURIOUS EMISSIONS	34
30MHz - 1GHz (<i>Worst case</i>)	34
1GHz - 18GHz.....	36
APPENDIX B.6: TEST RESULTS OF RADIATED EMISSIONS IN RESTRICTED BANDS	48
APPENDIX B.7: TEST RESULTS OF CONDUCTED EMISSION	64

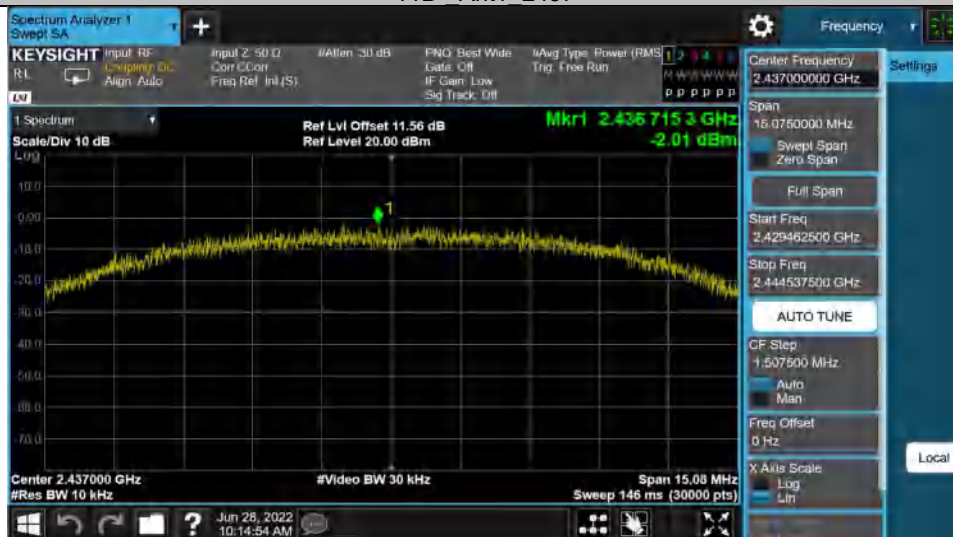
Appendix B.1: Test Results of Conducted Power Spectral Density

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-0.97	≤8.00	PASS
		2437	-2.01	≤8.00	PASS
		2462	-2.01	≤8.00	PASS
11G	Ant1	2412	-4.84	≤8.00	PASS
		2437	-5.78	≤8.00	PASS
		2462	-5.88	≤8.00	PASS
11N20	Ant1	2412	-4.01	≤8.00	PASS
		2437	-4.71	≤8.00	PASS
		2462	-5.37	≤8.00	PASS
11N40	Ant1	2422	-7.37	≤8.00	PASS
		2437	-7.46	≤8.00	PASS
		2452	-7.75	≤8.00	PASS

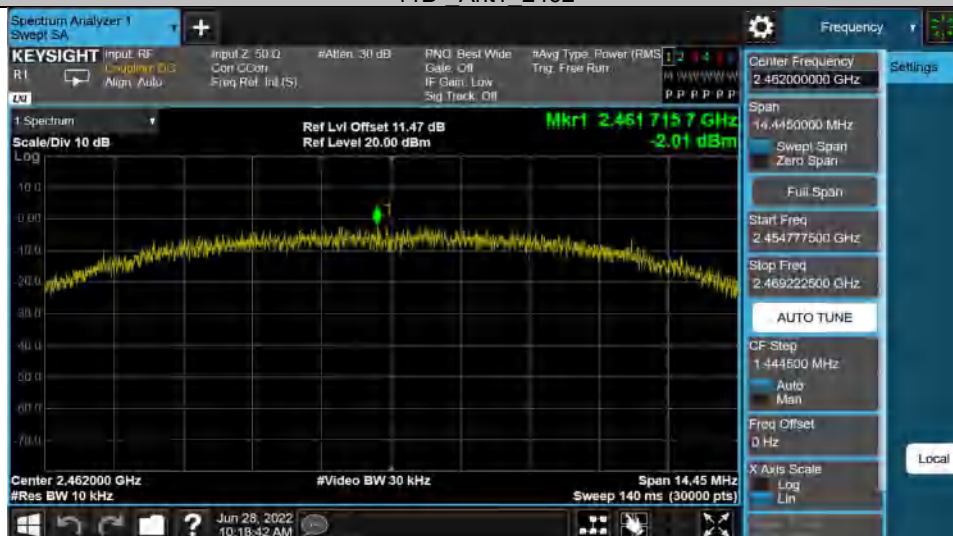
11B- Ant1_2412



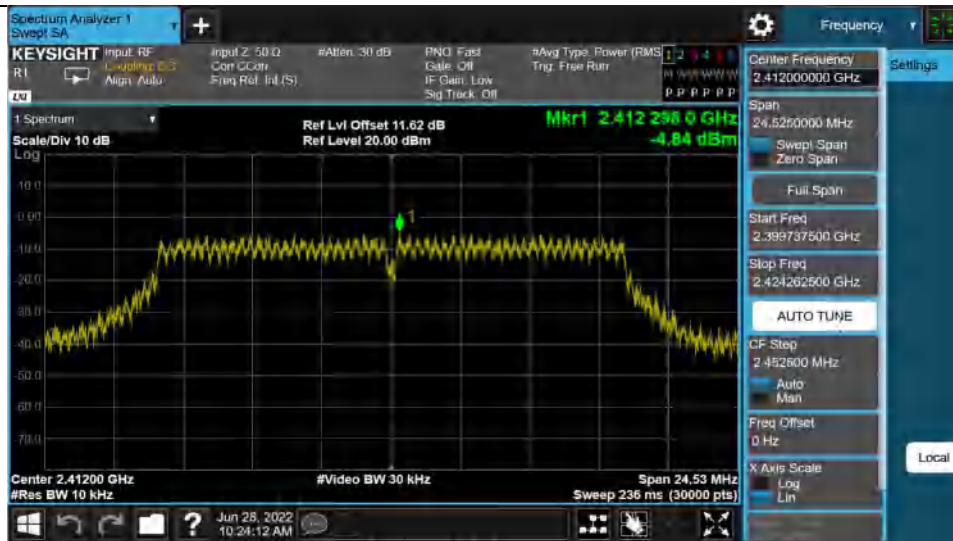
11B- Ant1_2437



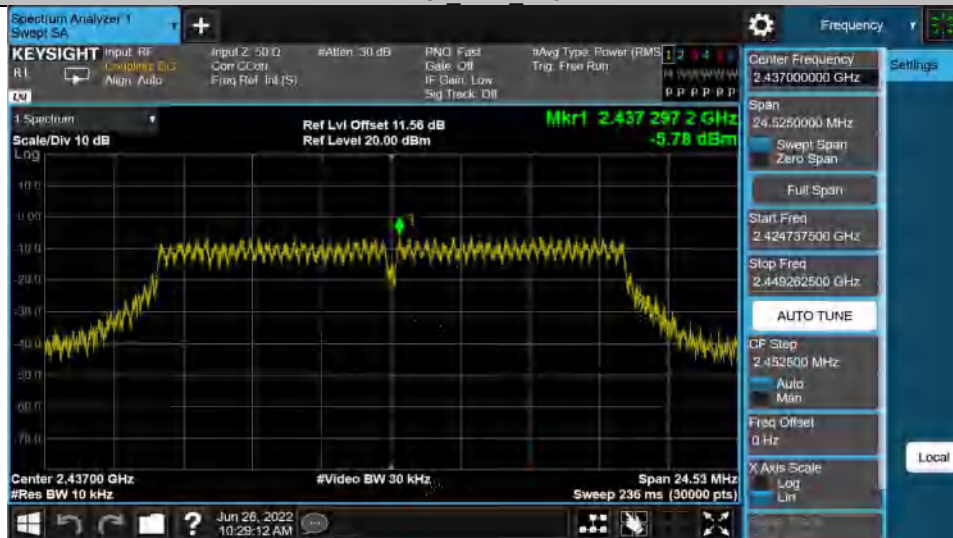
11B- Ant1_2462



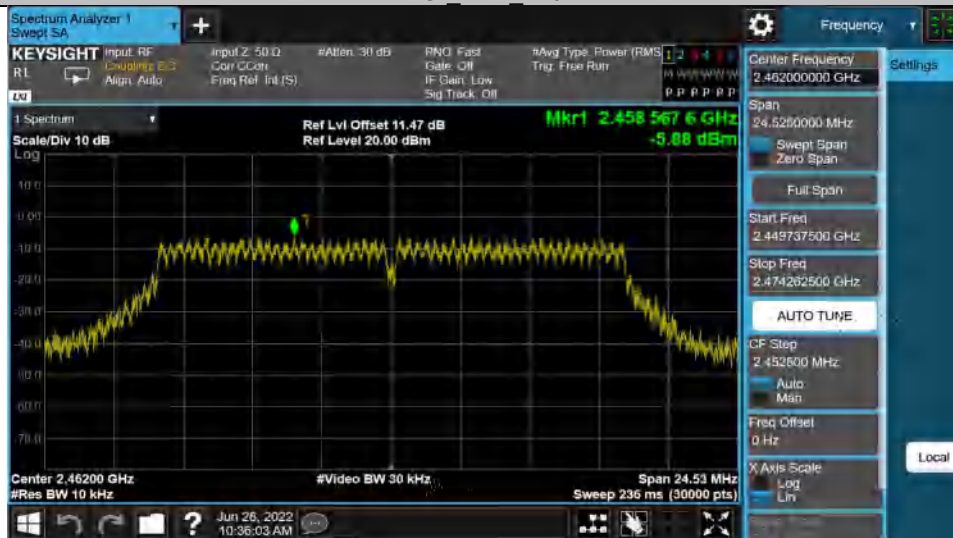
11G- Ant1_2412



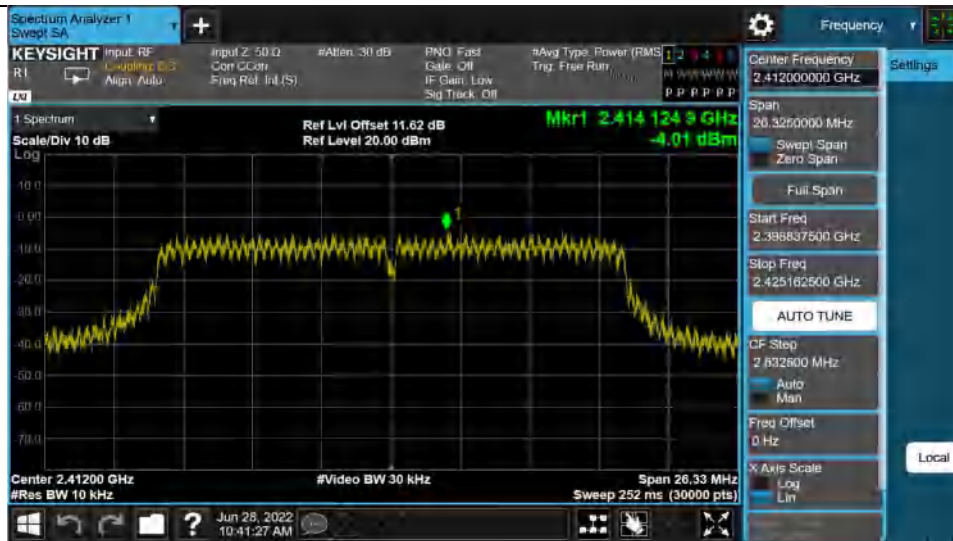
11G- Ant1 2437



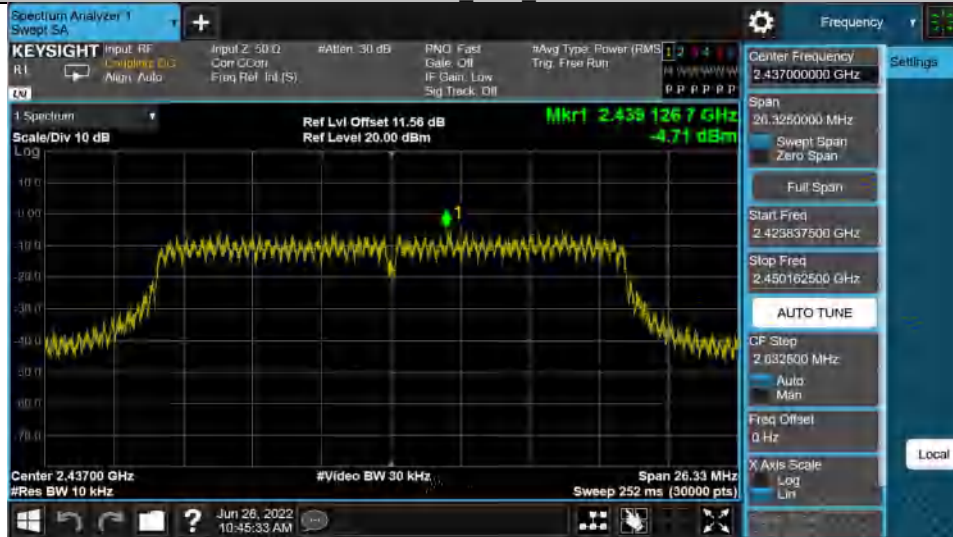
11G- Ant1 2462



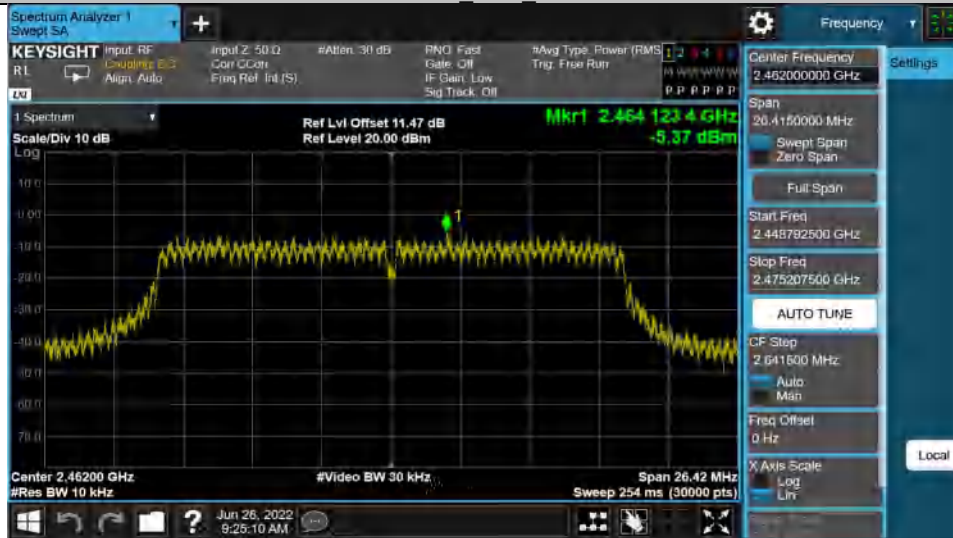
11N20- Ant1 2412



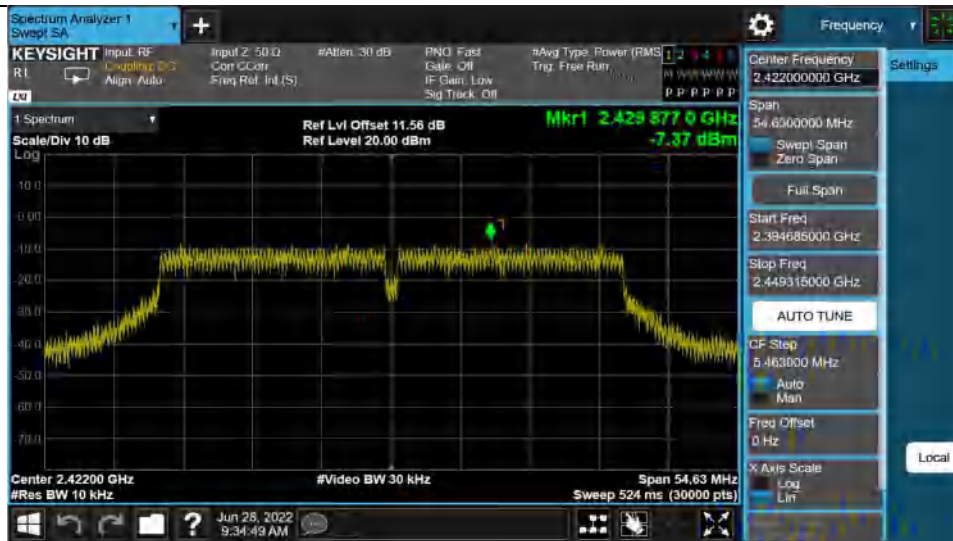
11N20- Ant1 2437



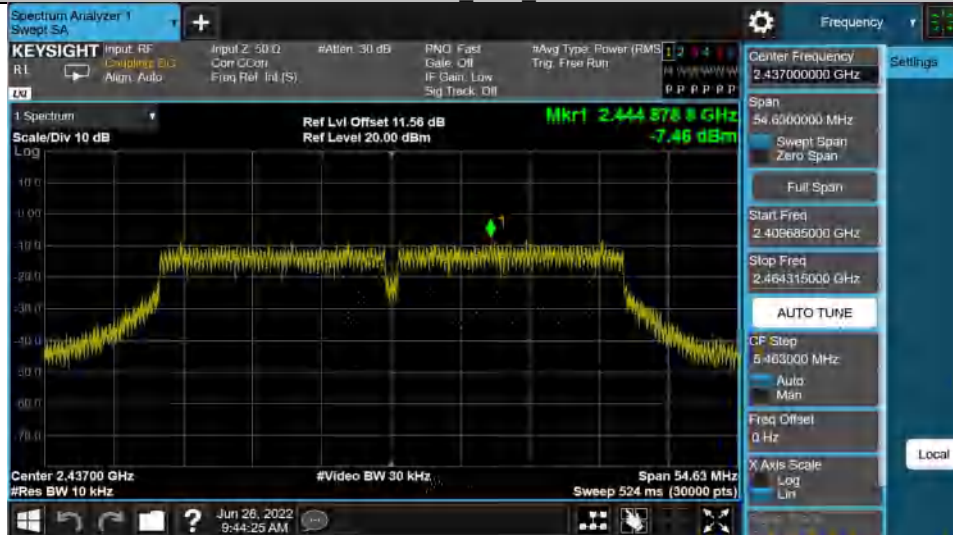
11N20- Ant1 2462



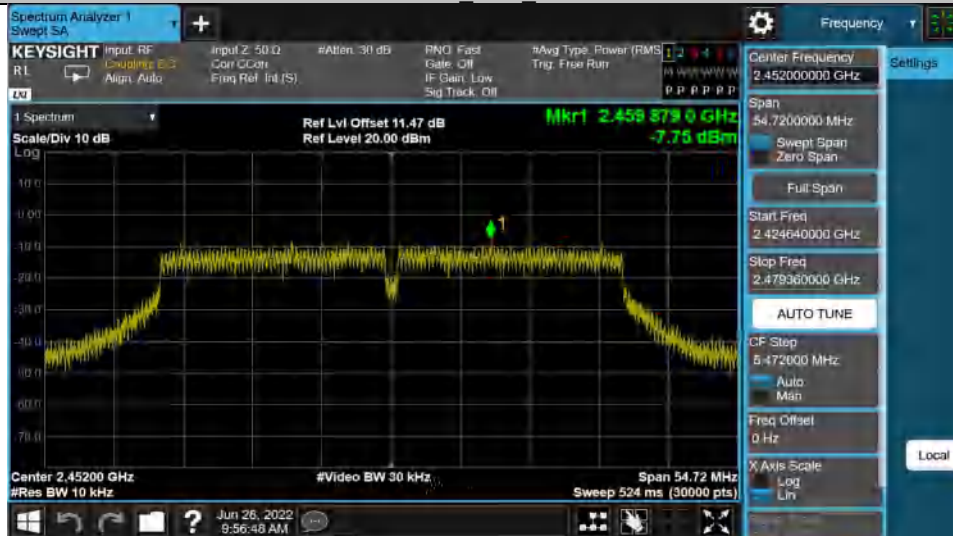
11N40- Ant1 2422



11N40- Ant1 2437



11N40- Ant1 2452



Appendix B.2: Test Results of 6dB Bandwidth

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.020	2406.990	2417.010	0.5	PASS
		2437	10.050	2431.990	2442.040	0.5	PASS
		2462	9.630	2456.990	2466.620	0.5	PASS
11G	Ant1	2412	16.350	2403.840	2420.190	0.5	PASS
		2437	16.350	2428.840	2445.190	0.5	PASS
		2462	16.350	2453.840	2470.190	0.5	PASS
11N20	Ant1	2412	17.550	2403.240	2420.790	0.5	PASS
		2437	17.550	2428.240	2445.790	0.5	PASS
		2462	17.610	2453.180	2470.790	0.5	PASS
11N40	Ant1	2422	36.420	2403.820	2440.240	0.5	PASS
		2437	36.420	2418.820	2455.240	0.5	PASS
		2452	36.480	2433.820	2470.300	0.5	PASS

11B Ant1 2412



11B Ant1 2437



11B Ant1 2462



11G Ant1 2412



11G Ant1 2437



11G Ant1 2462



11N20 Ant1 2412



11N20 Ant1 2437



11N20 Ant1 2462



11N40 Ant1 2422



11N40 Ant1 2437



11N40 Ant1 2452



Appendix B.3: Test Results of 99% Bandwidth

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.741	2405.070	2418.811	---	PASS
		2437	13.628	2430.195	2443.823	---	PASS
		2462	13.598	2455.141	2468.739	---	PASS
11G	Ant1	2412	18.447	2402.799	2421.246	---	PASS
		2437	18.423	2427.913	2446.336	---	PASS
		2462	18.237	2452.879	2471.116	---	PASS
11N20	Ant1	2412	19.270	2402.285	2421.555	---	PASS
		2437	19.212	2427.462	2446.674	---	PASS
		2462	17.728	2453.117	2470.845	---	PASS
11N40	Ant1	2422	36.808	2403.607	2440.415	---	PASS
		2437	36.774	2418.649	2455.423	---	PASS
		2452	36.780	2433.678	2470.458	---	PASS

11B- Ant1_2412



11B- Ant1_2437



11B- Ant1_2462



11G- Ant1_2412



11G- Ant1 2437



11G- Ant1 2462



11N20- Ant1 2412



11N20- Ant1 2437



11N20- Ant1 2462



11N40- Ant1 2422



Appendix B.4: Test Results of Conducted Spurious Emissions Measured in 100 kHz Bandwidth

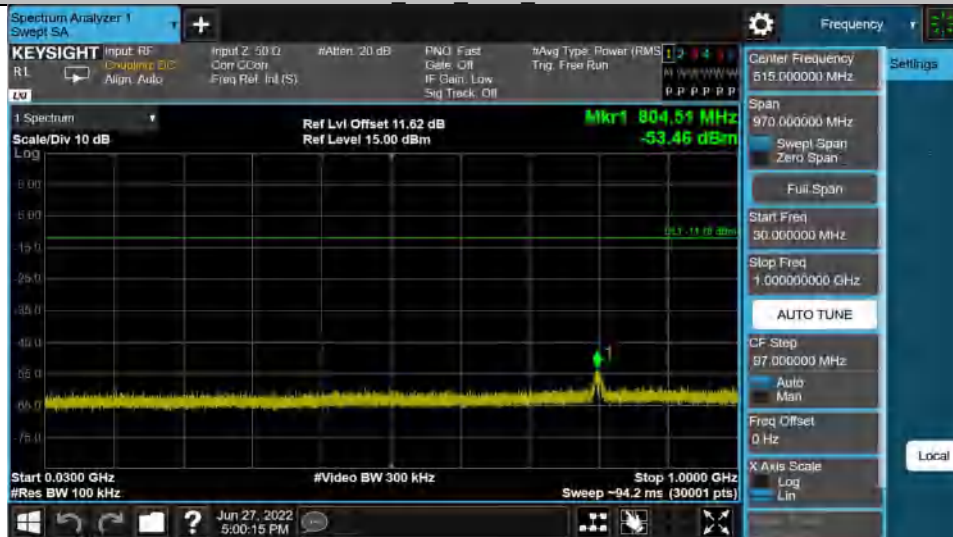
Conducted Spurious Emission

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	8.22	8.22	---	PASS
			30~1000	8.22	-53.46	≤-11.78	PASS
			1000~26500	8.22	-42.49	≤-11.78	PASS
		2437	Reference	7.26	7.26	---	PASS
			30~1000	7.26	-53.17	≤-12.74	PASS
			1000~26500	7.26	-42.37	≤-12.74	PASS
		2462	Reference	7.23	7.23	---	PASS
			30~1000	7.23	-53.48	≤-12.77	PASS
			1000~26500	7.23	-40.26	≤-12.77	PASS
11G	Ant1	2412	Reference	5.68	5.68	---	PASS
			30~1000	5.68	-52.66	≤-14.32	PASS
			1000~26500	5.68	-40.16	≤-14.32	PASS
		2437	Reference	4.68	4.68	---	PASS
			30~1000	4.68	-54.1	≤-15.32	PASS
			1000~26500	4.68	-38.44	≤-15.32	PASS
		2462	Reference	4.80	4.80	---	PASS
			30~1000	4.80	-51.68	≤-15.2	PASS
			1000~26500	4.80	-37.67	≤-15.2	PASS
11N20	Ant1	2412	Reference	5.72	5.72	---	PASS
			30~1000	5.72	-53.63	≤-14.28	PASS
			1000~26500	5.72	-40.23	≤-14.28	PASS
		2437	Reference	9.94	9.94	---	PASS
			30~1000	9.94	-46.58	≤-10.06	PASS
			1000~26500	4.72	-38.61	≤-15.28	PASS
		2462	Reference	1.93	1.93	---	PASS
			30~1000	1.93	-57.58	≤-18.07	PASS
			1000~26500	1.93	-48.16	≤-18.07	PASS
11N40	Ant1	2422	Reference	-0.34	-0.34	---	PASS
			30~1000	-0.34	-58.49	≤-20.34	PASS
			1000~26500	-0.34	-50.18	≤-20.34	PASS
		2437	Reference	-0.14	-0.14	---	PASS
			30~1000	-0.14	-57.57	≤-20.14	PASS
			1000~26500	-0.14	-49.84	≤-20.14	PASS
		2452	Reference	-0.79	-0.79	---	PASS
			30~1000	-0.79	-58.17	≤-20.79	PASS
			1000~26500	-0.79	-49.16	≤-20.79	PASS

11B- Ant1_2412_0~Reference



11B- Ant1_2412_30~1000



11B- Ant1_2412_1000~26500



11B- Ant1_2437_0~Reference



11B- Ant1 2437 30~1000



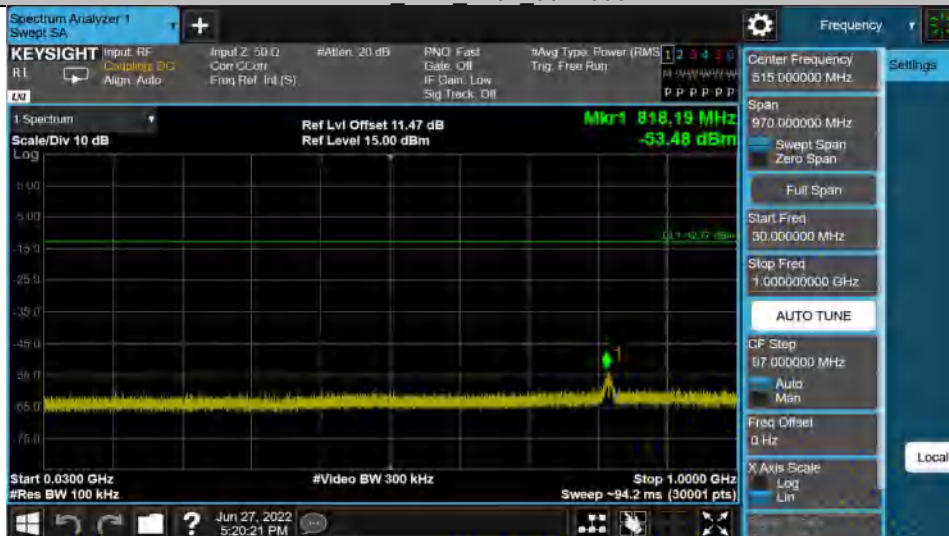
11B- Ant1 2437 1000~26500



11B- Ant1 2462 0~Reference



11B- Ant1 2462 30~1000



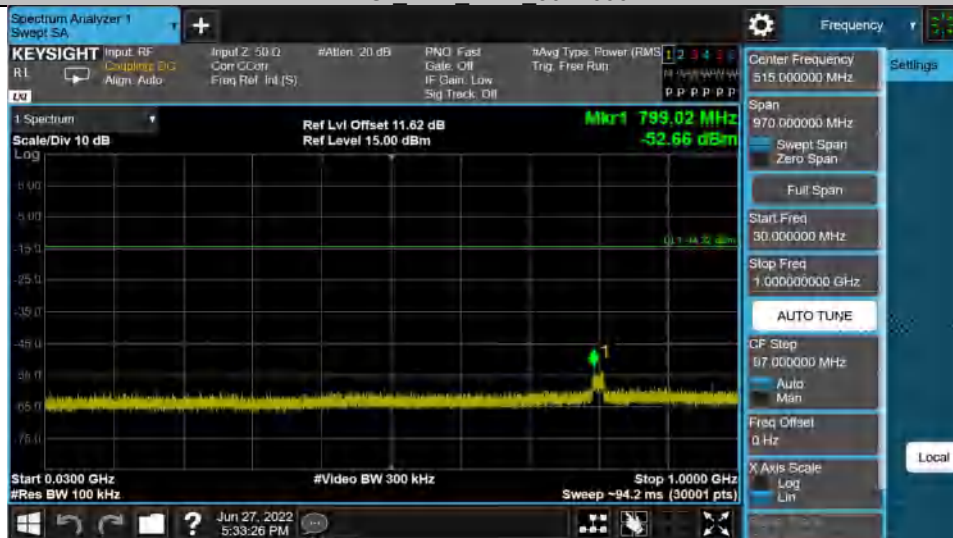
11B- Ant1 2462 1000~26500



11G- Ant1 2412 0~Reference



11G- Ant1 2412 30~1000



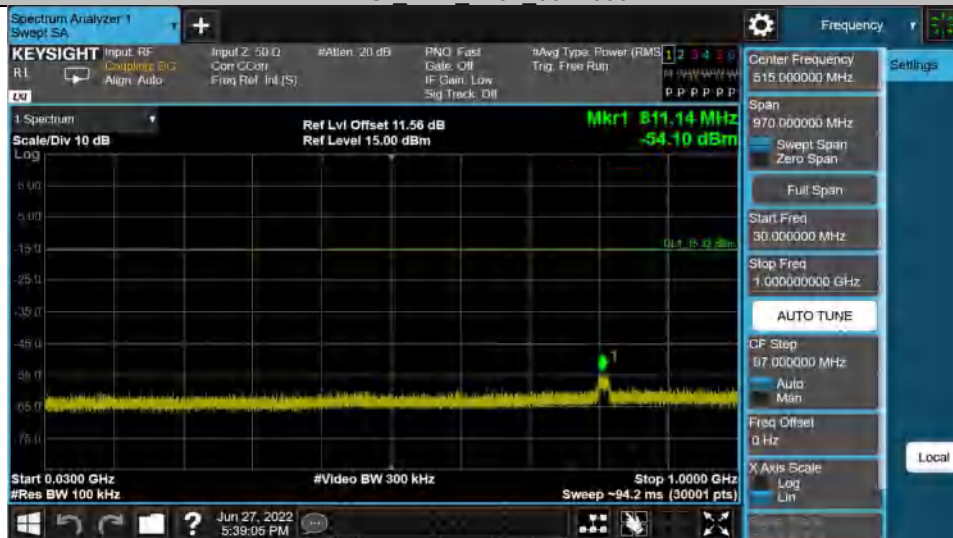
11G- Ant1 2412 1000~26500



11G- Ant1 2437 0~Reference



11G- Ant1 2437 30~1000



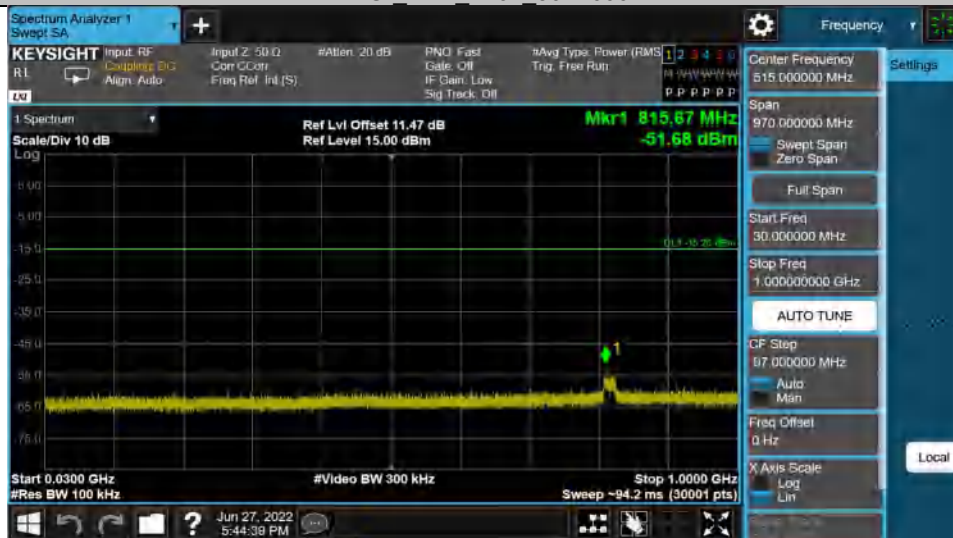
11G- Ant1 2437 1000~26500



11G- Ant1 2462 0~Reference



11G- Ant1 2462 30~1000



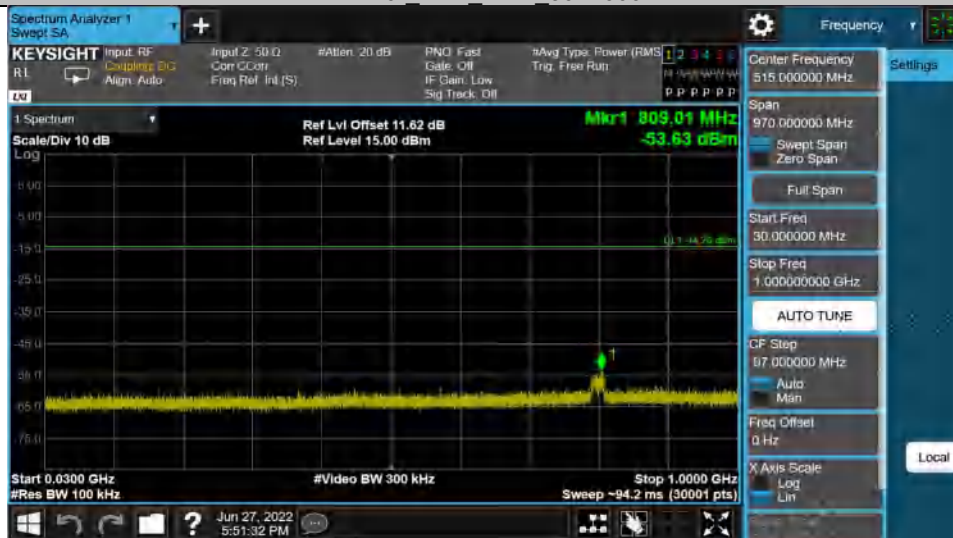
11G- Ant1 2462 1000~26500



11N20- Ant1 2412 0~Reference



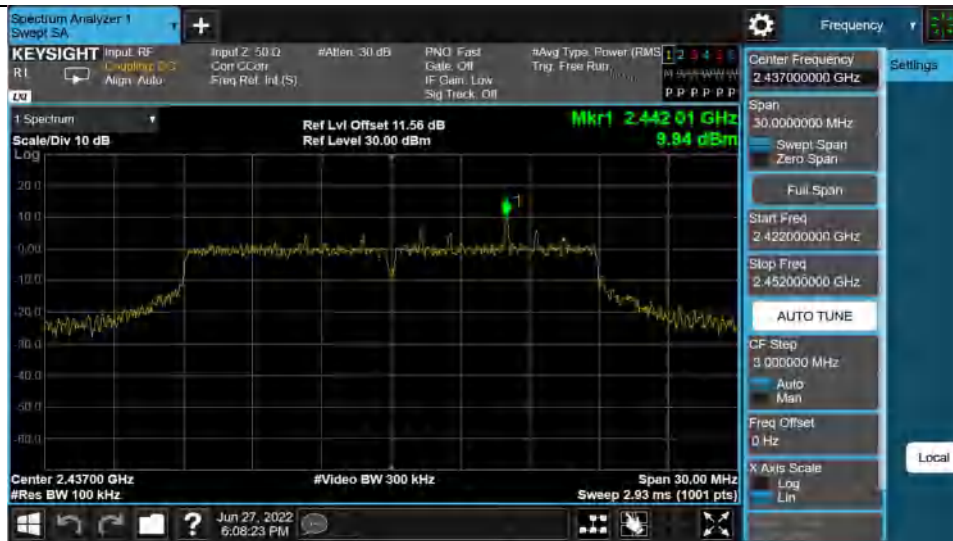
11N20- Ant1 2412 30~1000



11N20- Ant1 2412 1000~26500



11N20- Ant1 2437 0~Reference



11N20- Ant1 2437 30~1000



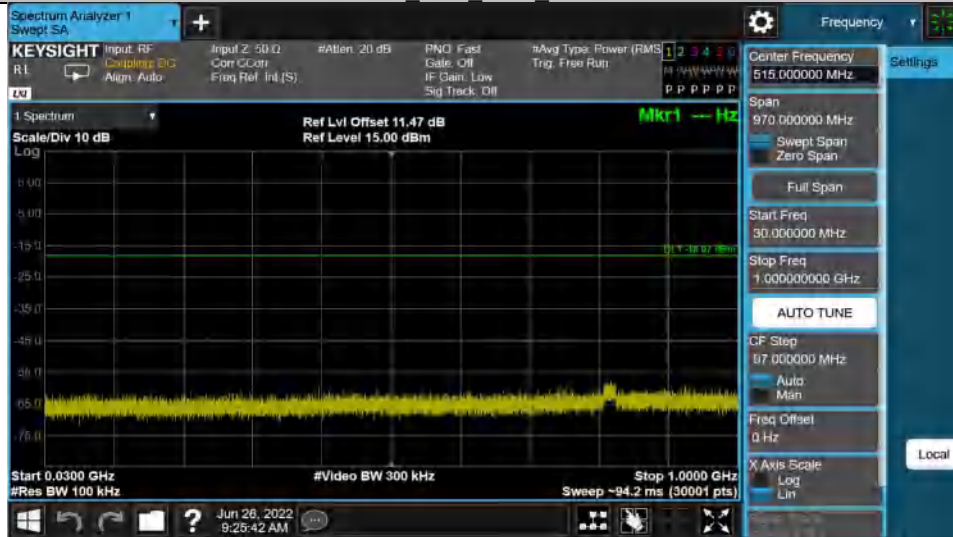
11N20- Ant1 2437 1000~26500



11N20- Ant1 2462 0~Reference



11N20- Ant1 2462 30~1000



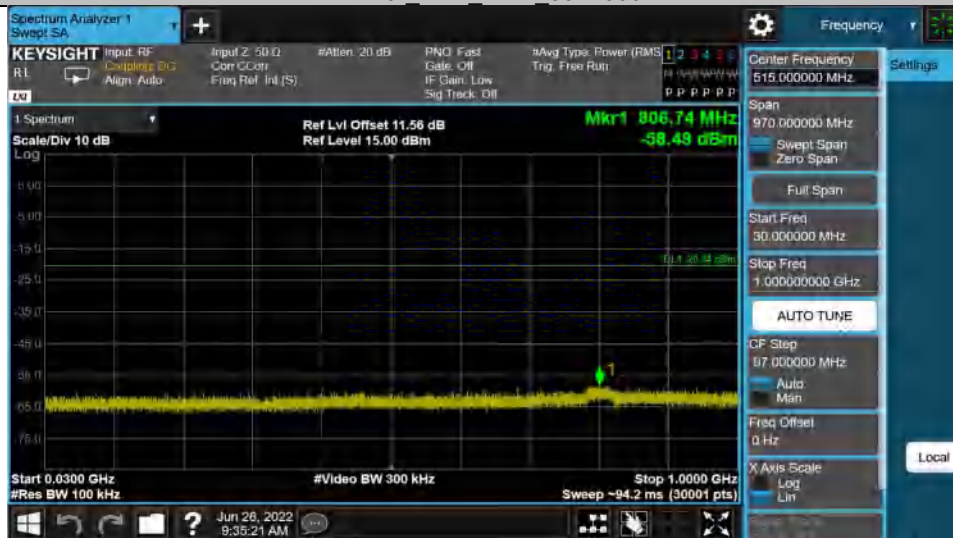
11N20- Ant1 2462 1000~26500



11N40- Ant1 2422 0~Reference



11N40- Ant1 2422 30~1000



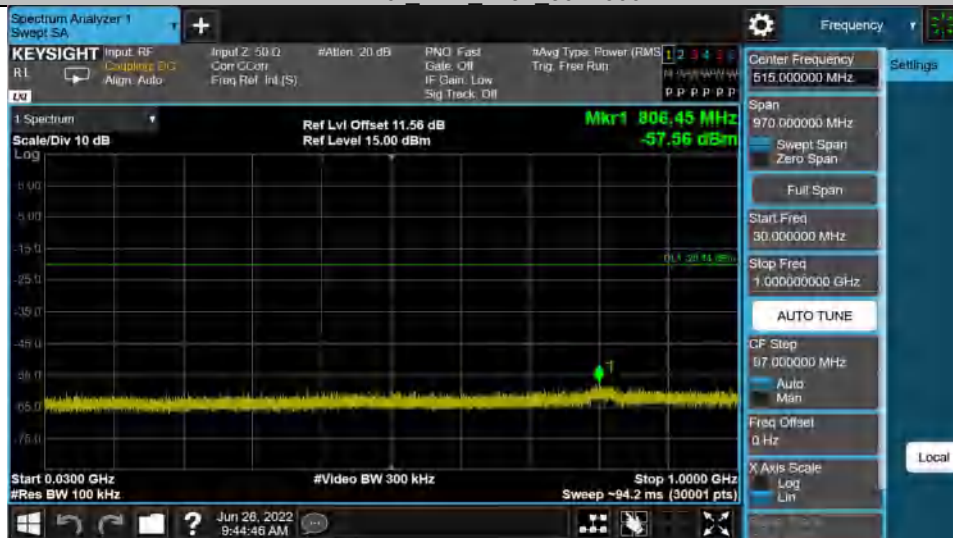
11N40- Ant1 2422 1000~26500



11N40- Ant1 2437 0~Reference



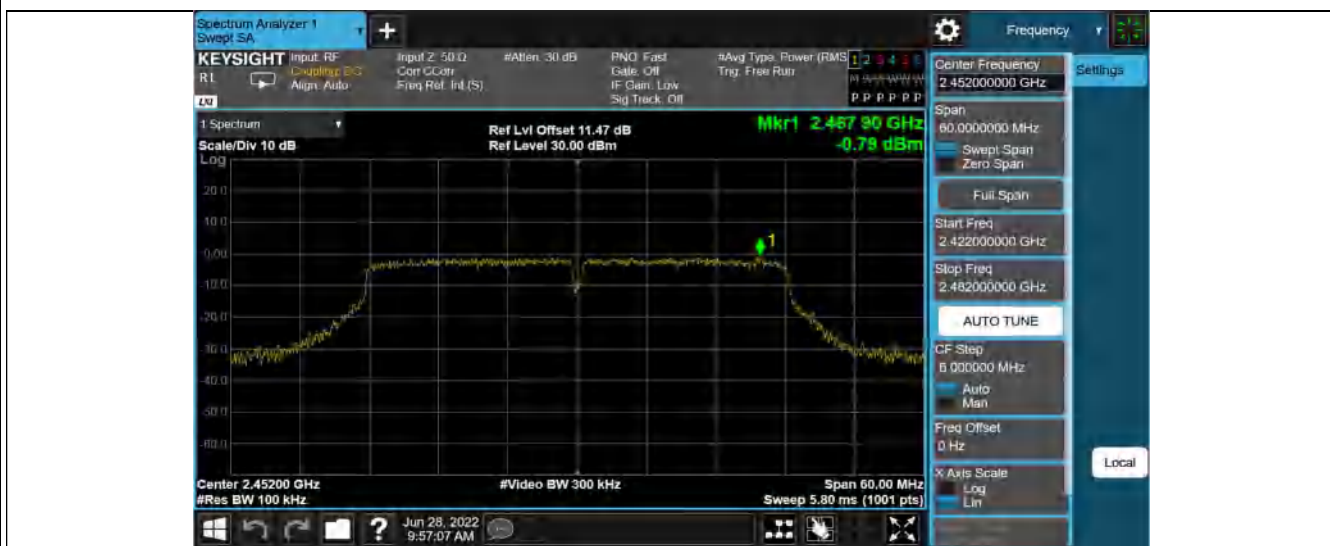
11N40- Ant1 2437 30~1000



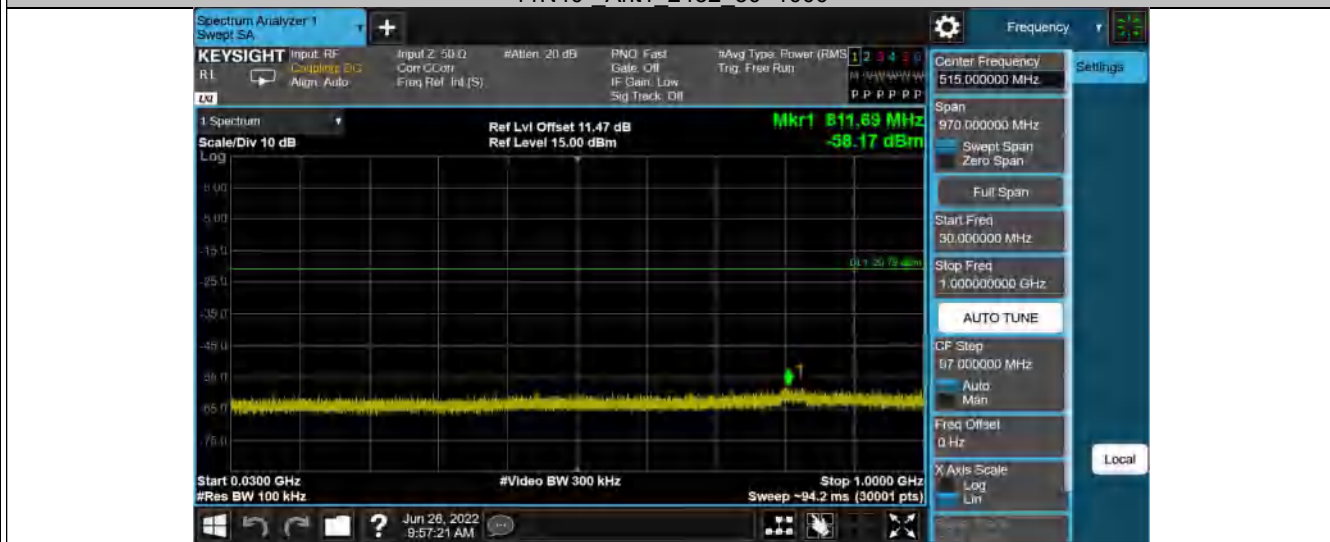
11N40- Ant1 2437 1000~26500



11N40- Ant1 2452 0~Reference



11N40- Ant1 2452 30~1000



11N40- Ant1 2452 1000~26500



Band Edge

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	8.19	-31.84	≤-11.81	PASS
		High	2462	7.16	-46.2	≤-12.84	PASS
11G	Ant1	Low	2412	5.57	-20.1	≤-14.43	PASS
		High	2462	4.85	-34.22	≤-15.15	PASS
11N20	Ant1	Low	2412	5.76	-19.93	≤-14.25	PASS
		High	2462	2.09	-37.62	≤-17.91	PASS
11N40	Ant1	Low	2422	-0.37	-23.13	≤-20.37	PASS
		High	2452	-1.00	-31.49	≤-21	PASS

11B- Ant1 Low 2412



11B- Ant1 High 2462



11G- Ant1 Low 2412



11G- Ant1 High 2462



11N20- Ant1 Low 2412



11N20- Ant1 High 2462



11N40- Ant1 Low 2422



11N40 Ant1 High 2452



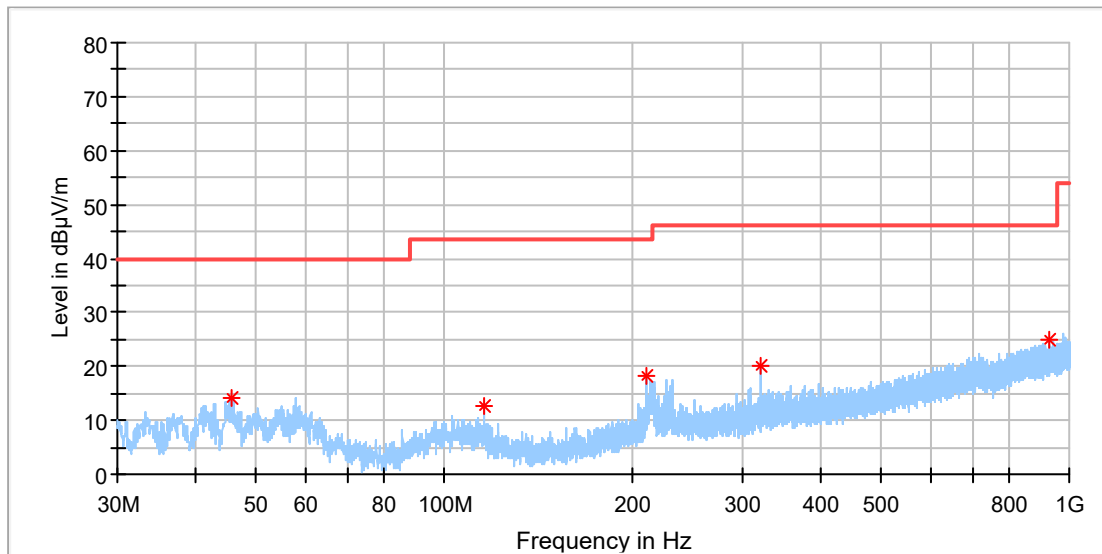
Note: 1. Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported. 2. This testing was carried out on different modulations, but only the worst case was presented in this report.

Appendix B.5: Test Results of Radiated Spurious Emissions

30MHz - 1GHz (Worst case)

EUT Information

EUT Name:	Smart Temperature and Humidity Monitoring Switch
Model:	THR320D
Test Mode:	WIFI 2.4G_11b_Ch1
Order No/Sample No:	168377937/A003284877-001
Test Voltage::	AC 120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

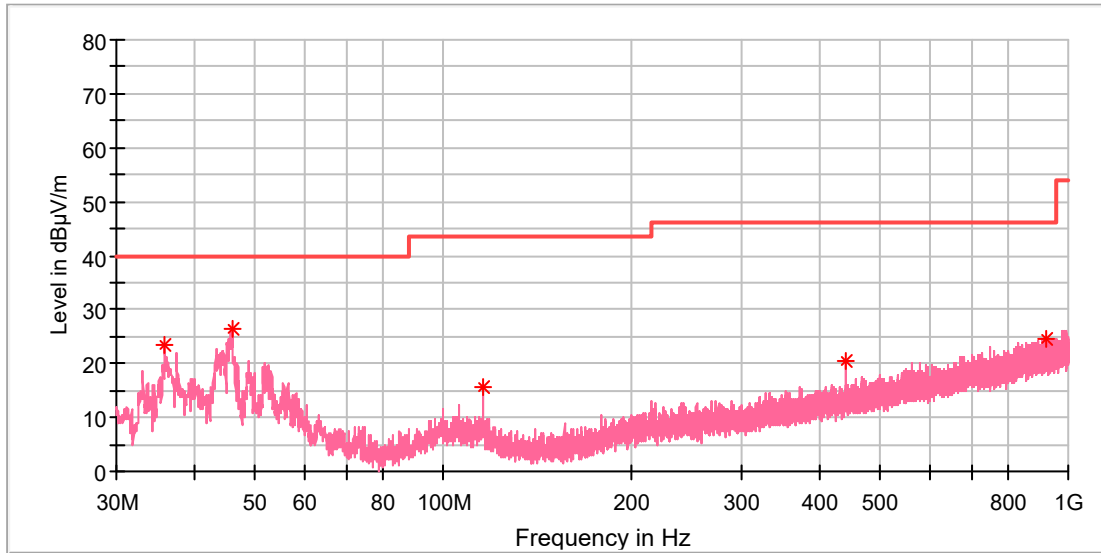
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
45.669231	14.09	40.00	25.91	100.0	H	294.0	-19.0
115.621154	12.71	43.50	30.79	100.0	H	190.0	-20.2
211.203462	18.12	43.50	25.38	100.0	H	330.0	-19.1
319.992692	19.93	46.00	26.07	100.0	H	238.0	-16.1
929.003462	24.89	46.00	21.11	100.0	H	17.0	-5.1

Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Smart Temperature and Humidity Monitoring Switch
 Model: THR320D
 Test Mode: WIFI 2.4G_11b_Ch1
 Order No/Sample No: 168377937/A003284877-001
 Test Voltage:: AC 120V/60Hz
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
35.857308	23.36	40.00	16.64	100.0	V	42.0	-21.9
46.042308	26.35	40.00	13.65	100.0	V	72.0	-19.0
115.621154	15.45	43.50	28.05	100.0	V	359.0	-20.2
440.011539	20.40	46.00	25.60	100.0	V	256.0	-13.5
924.265385	24.55	46.00	21.45	100.0	V	90.0	-5.2

Final Result

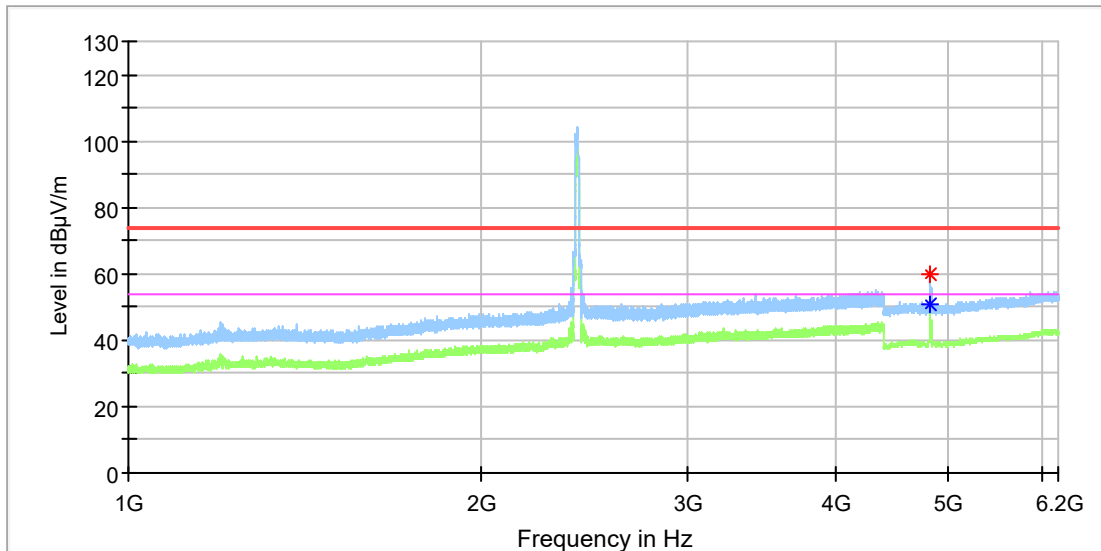
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

1GHz - 18GHz

Note: The highest waveform in the figure is Wi-Fi Fundamental.

EUT Information

EUT Name:	Smart Temperature and Humidity Monitoring Switch
Model:	THR320D
Test Mode:	WIFI 2.4G_11b_Ch1
Order No/Sample No:	168377937/A003284877-001
Test Voltage::	AC 120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

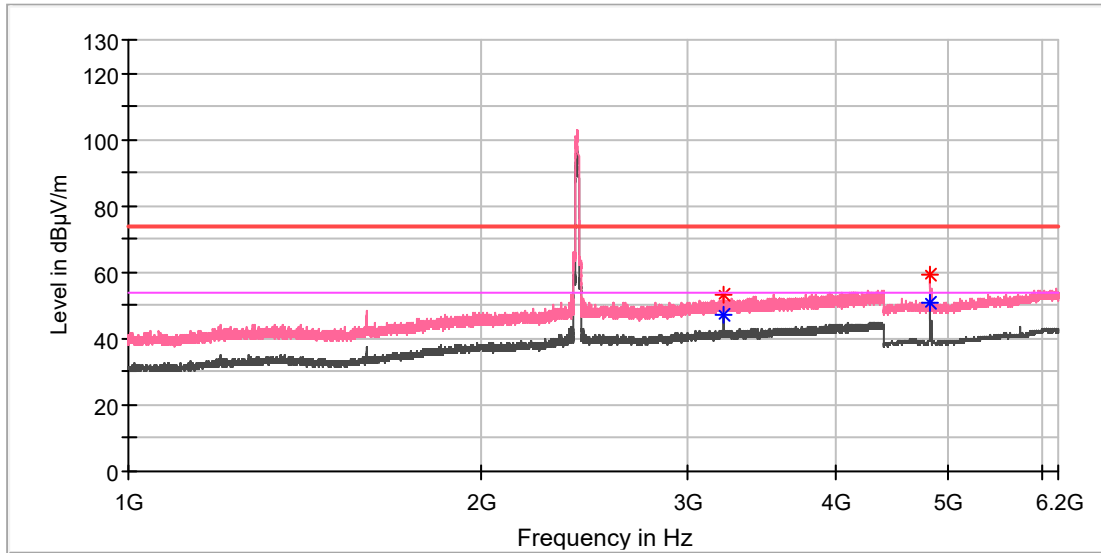
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4824.000000	59.95	---	74.00	14.05	100.0	H	329.0	11.8
4824.500000	---	50.98	54.00	3.02	100.0	H	315.0	11.8

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Smart Temperature and Humidity Monitoring Switch
 Model: THR320D
 Test Mode: WIFI 2.4G_11b_Ch1
 Order No/Sample No: 168377937/A003284877-001
 Test Voltage:: AC 120V/60Hz
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

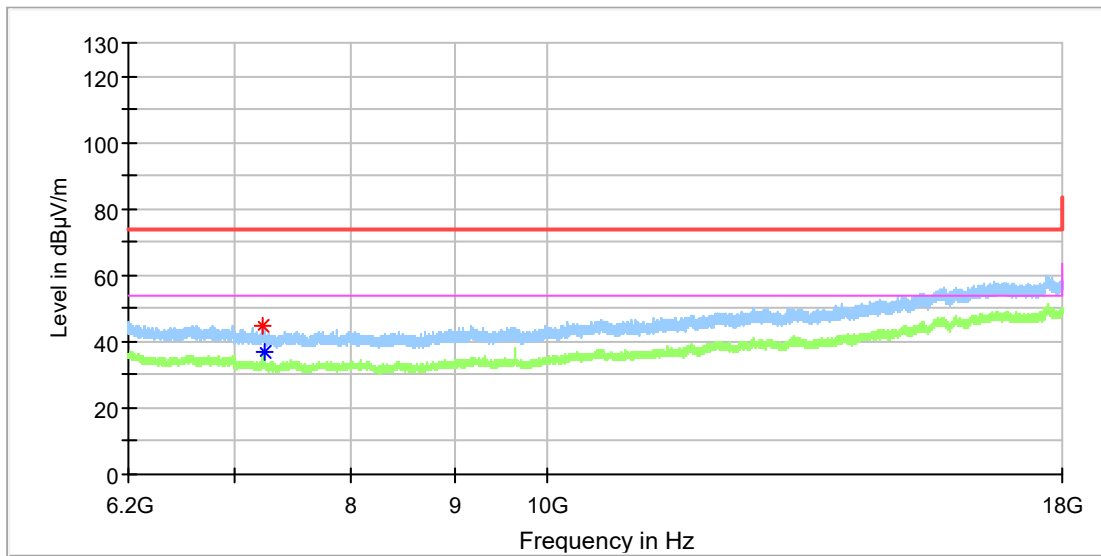
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3215.950000	52.97	---	74.00	21.03	100.0	V	0.0	8.6
3215.950000	---	47.28	54.00	6.72	100.0	V	0.0	8.6
4824.000000	59.14	---	74.00	14.86	100.0	V	263.0	11.8
4824.500000	---	50.79	54.00	3.21	100.0	V	263.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Smart Temperature and Humidity Monitoring Switch
 Model: THR320D
 Test Mode: WIFI 2.4G_11b_Ch1
 Order No/Sample No: 168377937/A003284877-001
 Test Voltage:: AC 120V/60Hz
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

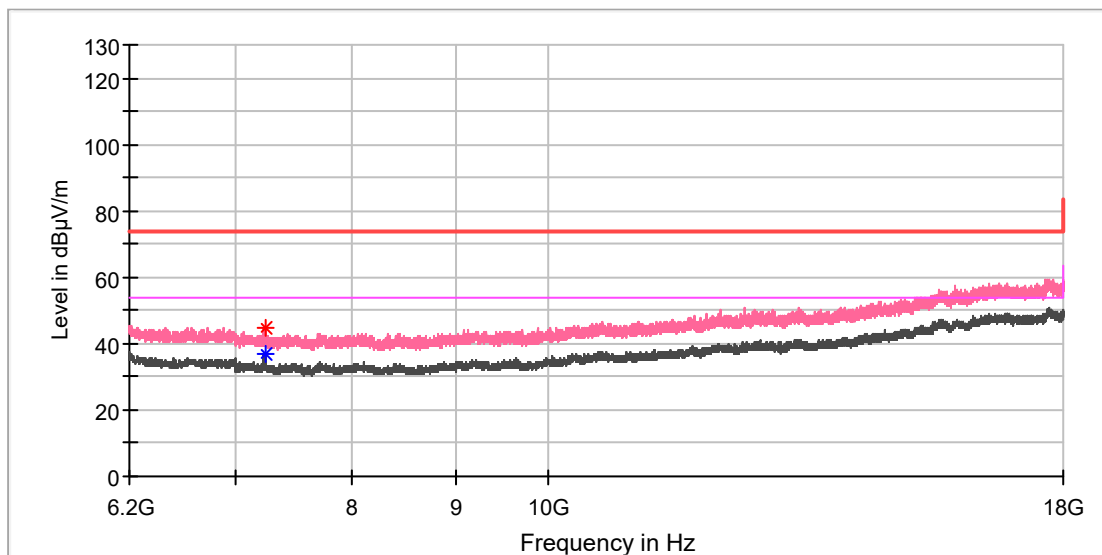
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7234.958333	45.00	---	74.00	29.00	100.0	H	44.0	8.6
7238.891667	---	36.90	54.00	17.10	100.0	H	315.0	8.6

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Smart Temperature and Humidity Monitoring Switch
 Model: THR320D
 Test Mode: WIFI 2.4G_11b_Ch1
 Order No/Sample No: 168377937/A003284877-001
 Test Voltage:: AC 120V/60Hz
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

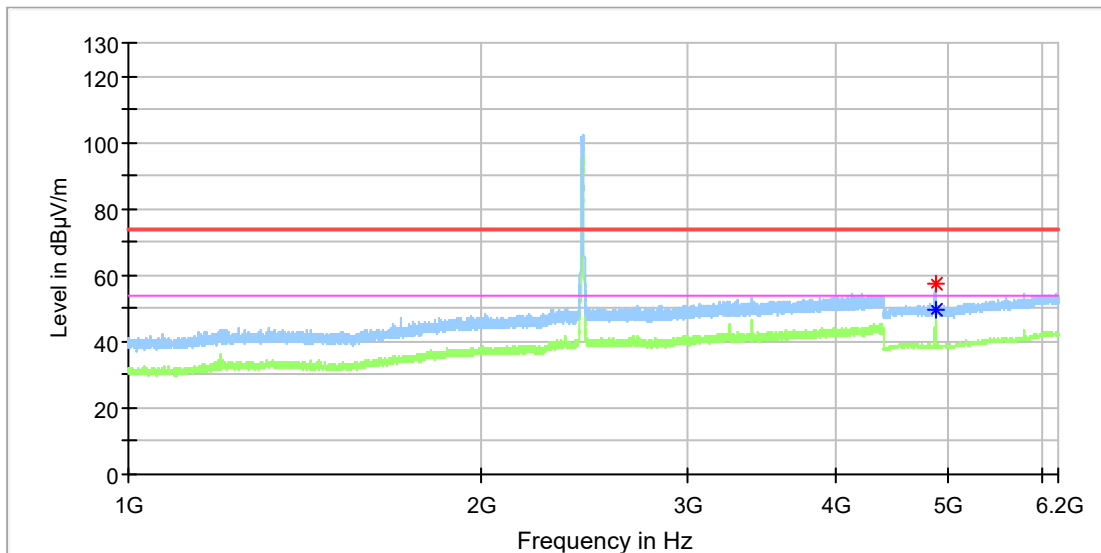
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7237.908333	44.81	---	74.00	29.19	100.0	V	311.0	8.6
7237.908333	---	37.13	54.00	16.87	100.0	V	311.0	8.6

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Smart Temperature and Humidity Monitoring Switch
 Model: THR320D
 Test Mode: WIFI 2.4G_11b_Ch6
 Order No/Sample No: 168377937/A003284877-001
 Test Voltage:: AC 120V/60Hz
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

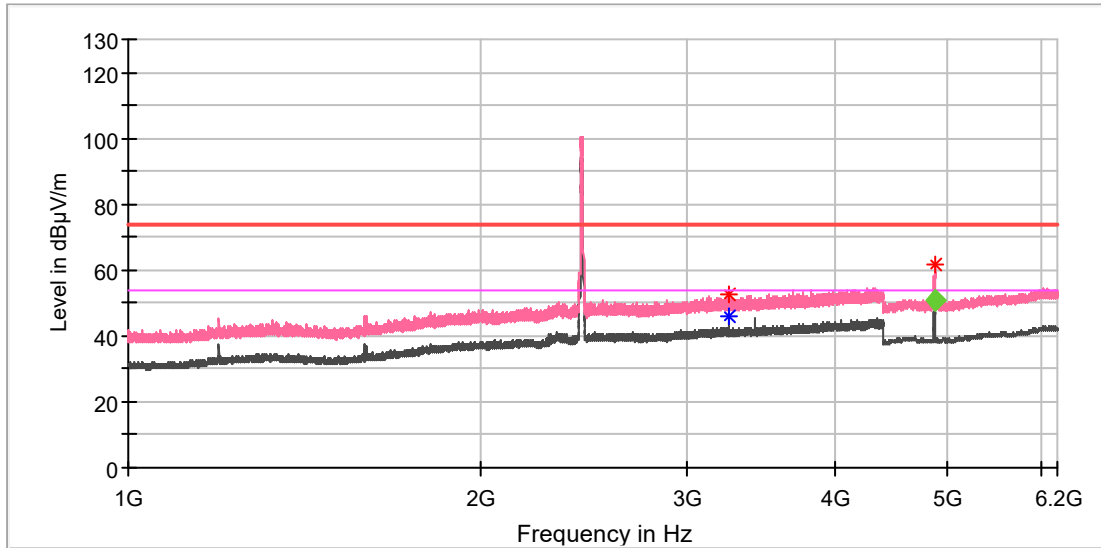
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4873.000000	---	49.57	54.00	4.43	100.0	H	301.0	11.8
4873.500000	57.63	---	74.00	16.37	100.0	H	301.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Smart Temperature and Humidity Monitoring Switch
 Model: THR320D
 Test Mode: WIFI 2.4G_11b_Ch6
 Order No/Sample No: 168377937/A003284877-001
 Test Voltage:: AC 120V/60Hz
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical_Freqs

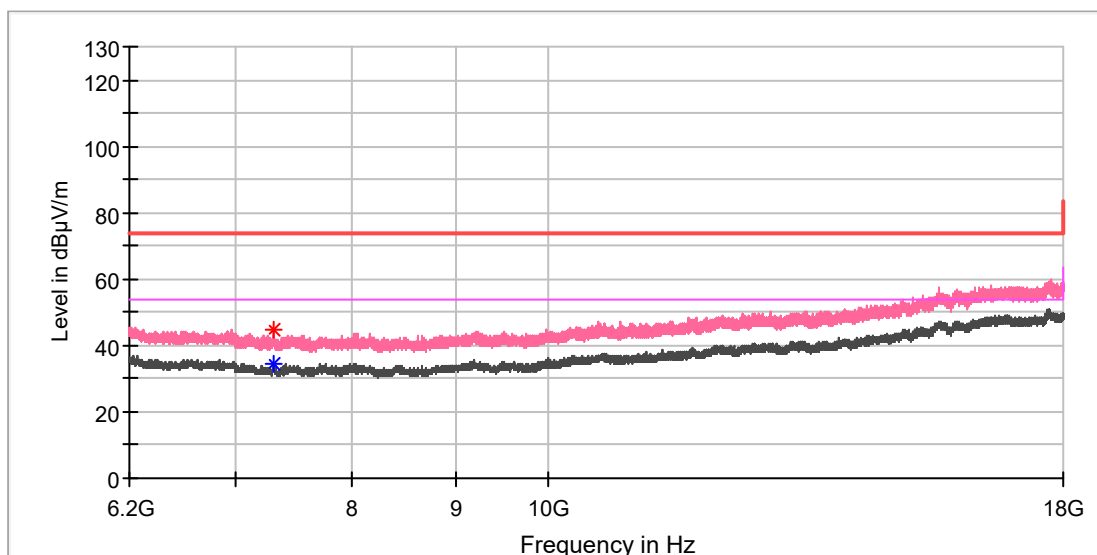
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3249.270000	---	45.83	54.00	8.17	100.0	V	0.0	8.5
3249.440000	52.52	---	74.00	21.48	100.0	V	6.0	8.5
4874.000000	61.41	---	74.00	12.59	100.0	V	261.0	11.8

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4873.261111	50.90	54.00	3.10	100.0	V	260.0	11.8

EUT Information

EUT Name:	Smart Temperature and Humidity Monitoring Switch
Model:	THR320D
Test Mode:	WIFI 2.4G_11b_Ch6
Order No/Sample No:	168377937/A003284877-001
Test Voltage::	AC 120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

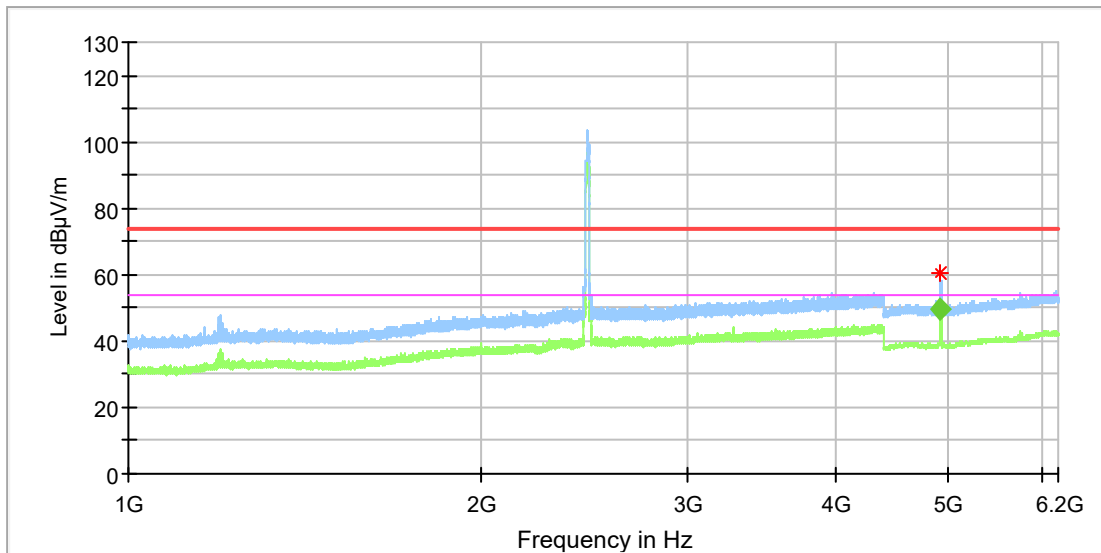
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7308.216667	---	34.63	54.00	19.37	100.0	V	314.0	8.2
7310.675000	44.68	---	74.00	29.32	100.0	V	171.0	8.2

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: Smart Temperature and Humidity Monitoring Switch
 Model: THR320D
 Test Mode: WIFI 2.4G_11b_Ch11
 Order No/Sample No: 168377937/A003284877-001
 Test Voltage:: AC 120V/60Hz
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

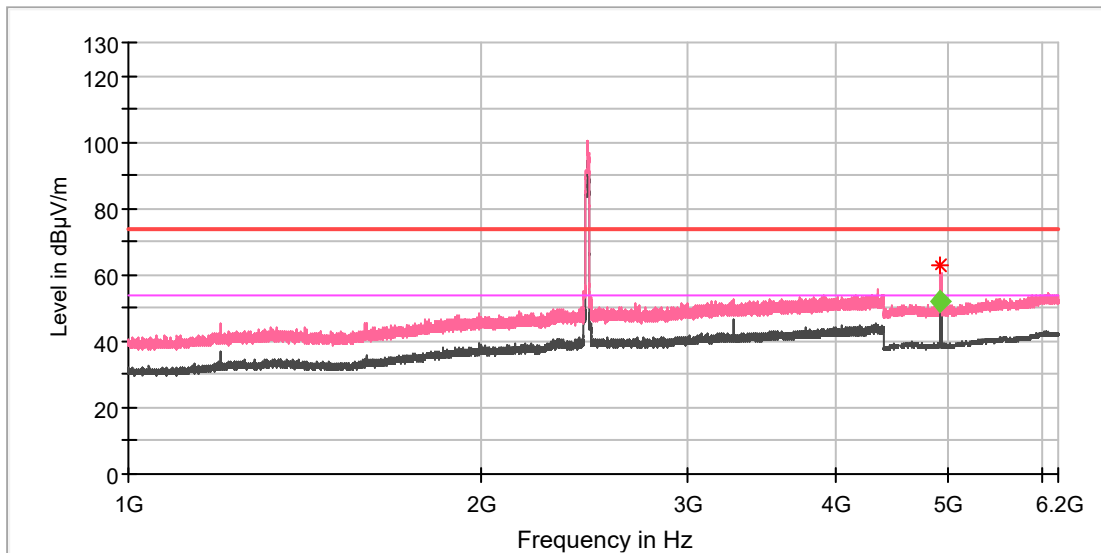
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4924.000000	60.76	---	74.00	13.24	100.0	H	301.0	11.8

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4924.655556	49.31	54.00	4.69	100.0	H	299.0	11.8

EUT Information

EUT Name:	Smart Temperature and Humidity Monitoring Switch
Model:	THR320D
Test Mode:	WIFI 2.4G_11b_Ch11
Order No/Sample No:	168377937/A003284877-001
Test Voltage::	AC 120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

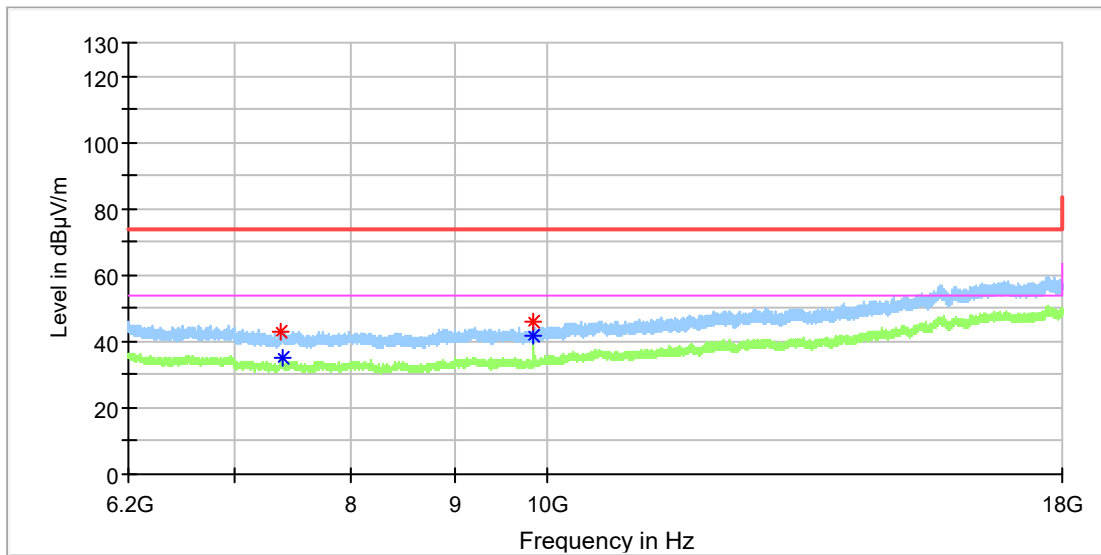
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4924.000000	62.62	---	74.00	11.38	100.0	V	262.0	11.8

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4923.261111	52.25	54.00	1.75	100.0	V	261.0	11.8

EUT Information

EUT Name: Smart Temperature and Humidity Monitoring Switch
 Model: THR320D
 Test Mode: WIFI 2.4G_11b_Ch11
 Order No/Sample No: 168377937/A003284877-001
 Test Voltage:: AC 120V/60Hz
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical_Freqs

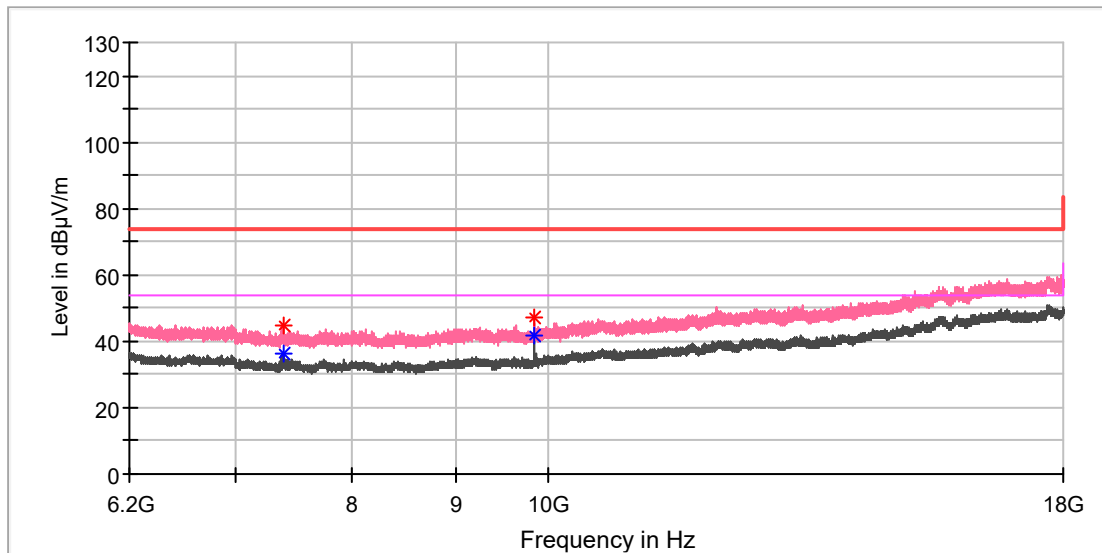
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7379.016667	43.22	---	74.00	30.78	100.0	H	321.0	8.2
7387.866667	---	35.18	54.00	18.82	100.0	H	321.0	8.2
9847.675000	46.20	---	74.00	27.80	100.0	H	6.0	10.6
9847.675000	---	42.01	54.00	11.99	100.0	H	6.0	10.6

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	Smart Temperature and Humidity Monitoring Switch
Model:	THR320D
Test Mode:	WIFI 2.4G_11b_Ch11
Order No/Sample No:	168377937/A003284877-001
Test Voltage::	AC 120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

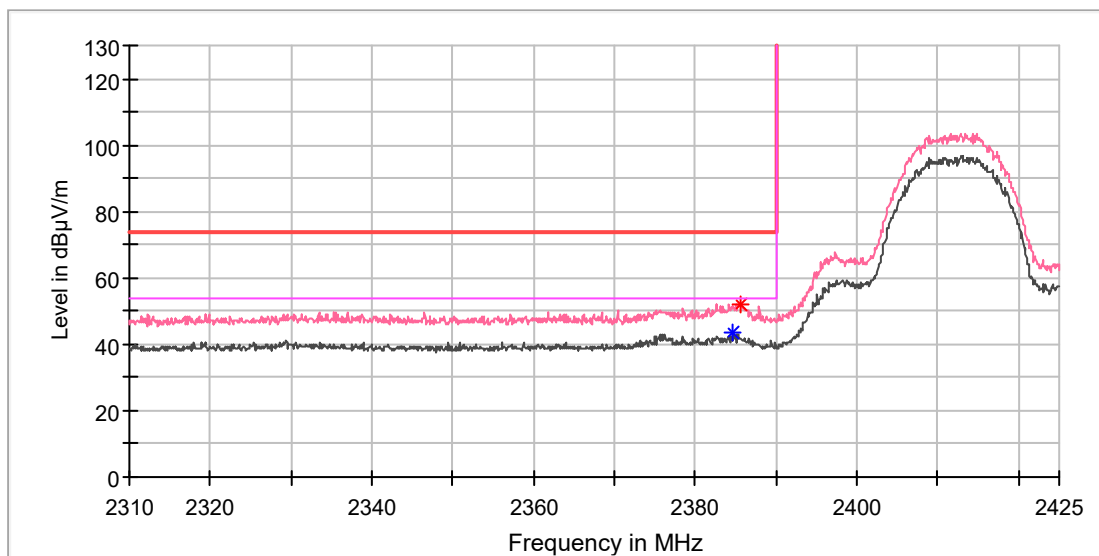
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7388.850000	---	36.03	54.00	17.97	100.0	V	312.0	8.2
7391.800000	44.58	---	74.00	29.42	100.0	V	312.0	8.3
9848.166667	46.98	---	74.00	27.02	100.0	V	245.0	10.6
9848.166667	---	41.67	54.00	12.33	100.0	V	245.0	10.6

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	Smart Temperature and Humidity Monitoring Switch
Model:	THR320D
Test Mode:	WIFI 2.4G_11b_Ch1
Order No/Sample No:	168377937/A003284877-001
Test Voltage::	AC 120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

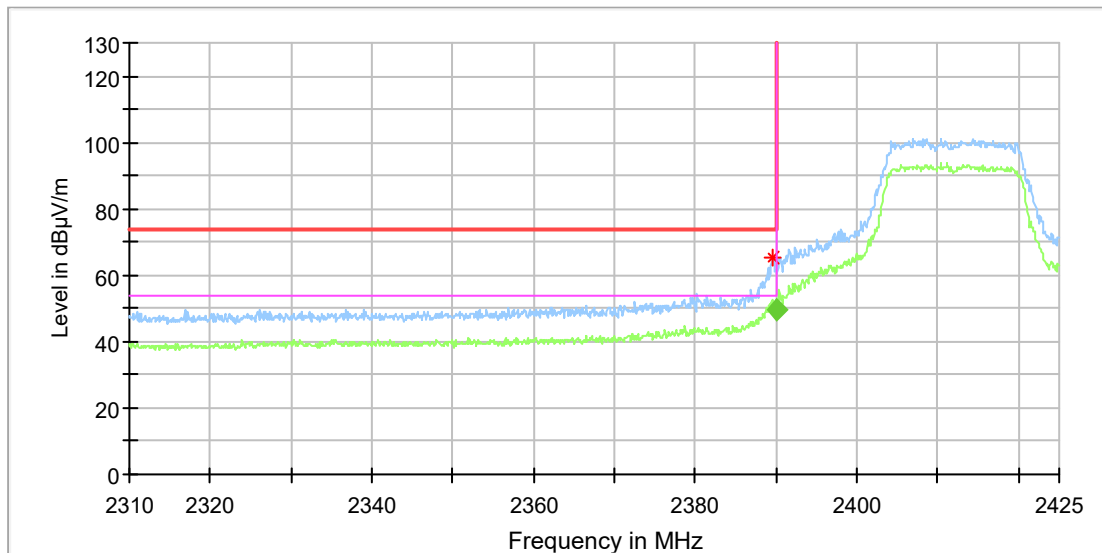
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2384.700000	---	43.38	54.00	10.62	100.0	V	276.0	7.0
2385.500000	51.91	---	74.00	22.09	100.0	V	276.0	7.0

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	Smart Temperature and Humidity Monitoring Switch
Model:	THR320D
Test Mode:	WIFI 2.4G_11g_Ch1
Order No/Sample No:	168377937/A003284877-001
Test Voltage::	AC 120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

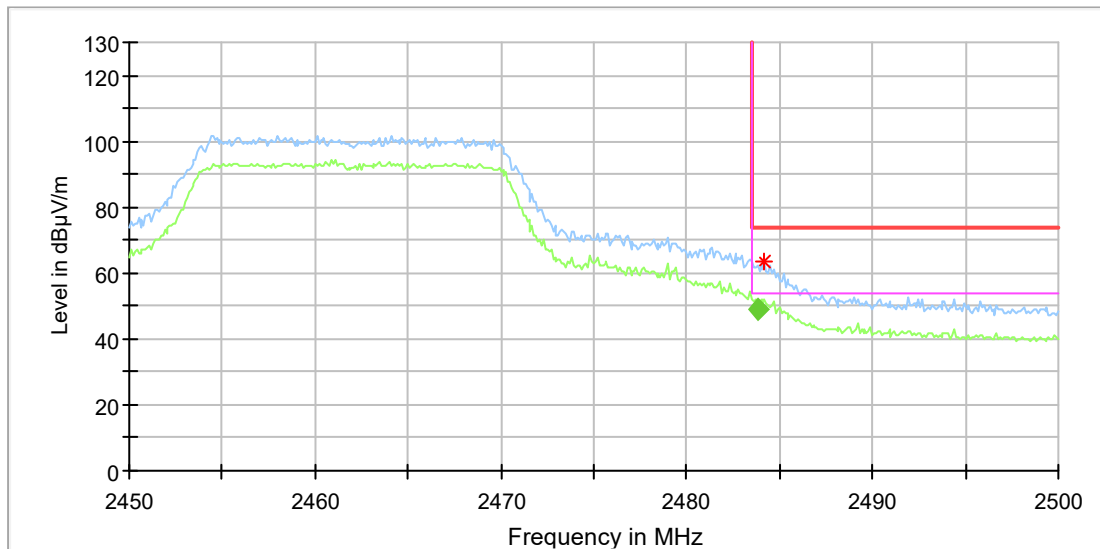
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.600000	65.54	---	74.00	8.46	100.0	H	179.0	7.0

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.996700	49.74	54.00	4.26	105.0	H	174.0	7.0

EUT Information

EUT Name:	Smart Temperature and Humidity Monitoring Switch
Model:	THR320D
Test Mode:	WIFI 2.4G_11g_Ch11
Order No/Sample No:	168377937/A003284877-001
Test Voltage::	AC 120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

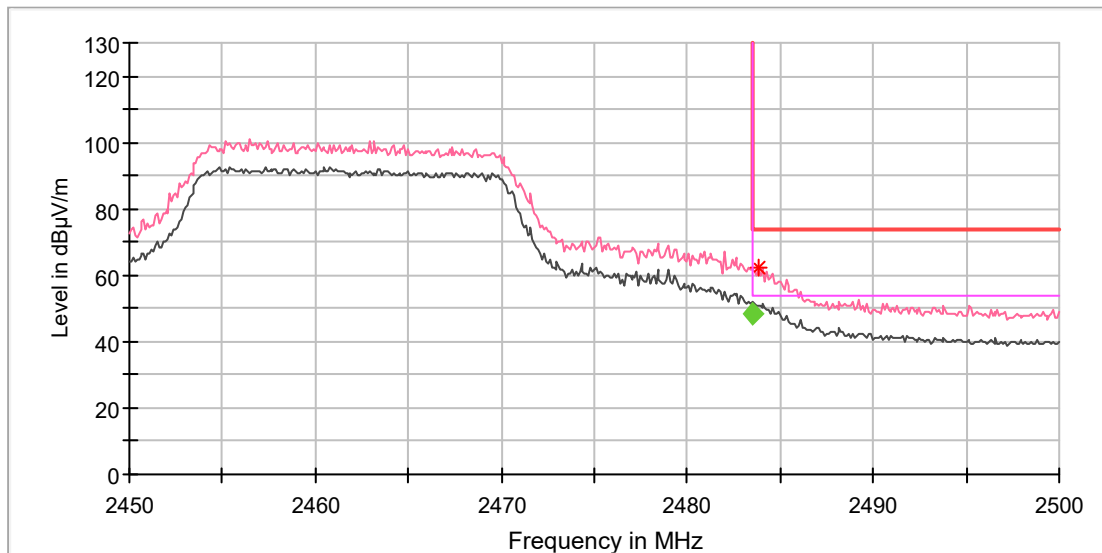
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.200000	63.20	---	74.00	10.80	100.0	H	157.0	7.4

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.866950	49.22	54.00	4.78	105.0	H	155.0	7.4

EUT Information

EUT Name:	Smart Temperature and Humidity Monitoring Switch
Model:	THR320D
Test Mode:	WIFI 2.4G_11g_Ch11
Order No/Sample No:	168377937/A003284877-001
Test Voltage::	AC 120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

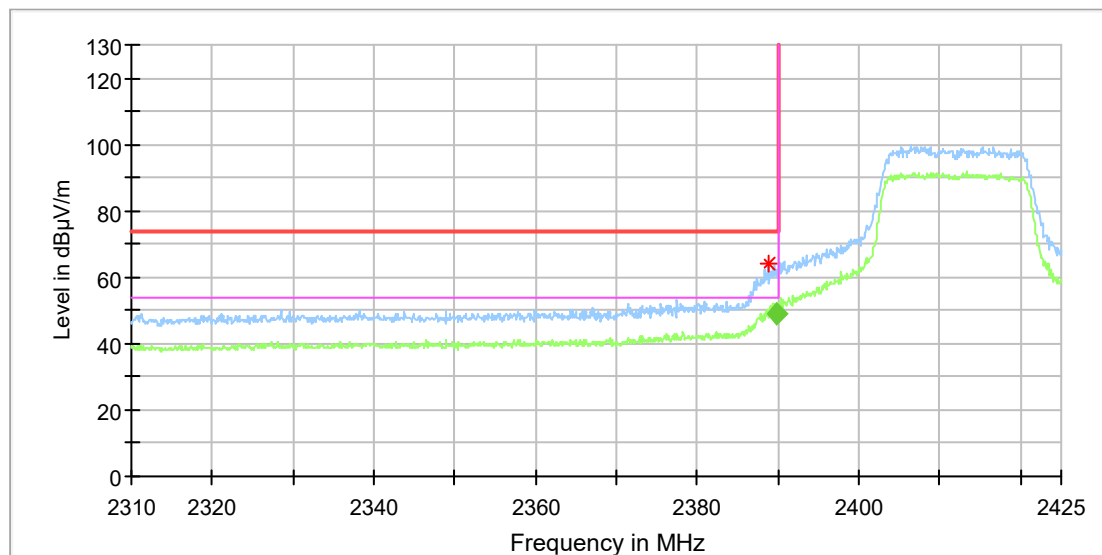
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.80000	62.08	---	74.00	11.92	100.0	V	227.0	7.4

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.503900	48.55	54.00	5.45	105.0	V	256.0	7.4

EUT Information

EUT Name:	Smart Temperature and Humidity Monitoring Switch
Model:	THR320D
Test Mode:	WIFI 2.4G_11n20_Ch1
Order No/Sample No:	168377937/A003284877-001
Test Voltage::	AC 120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

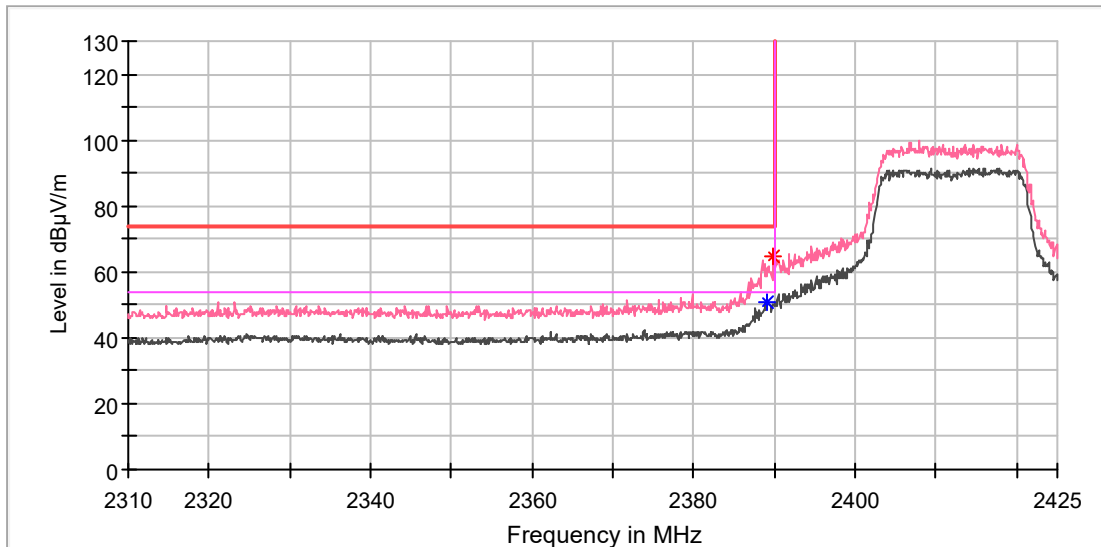
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.884400	63.89	---	74.00	10.11	100.0	H	173.0	7.0

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.884400	48.93	54.00	5.07	105.0	H	172.0	7.0

EUT Information

EUT Name:	Smart Temperature and Humidity Monitoring Switch
Model:	THR320D
Test Mode:	WIFI 2.4G_11n20_Ch1
Order No/Sample No:	168377937/A003284877-001
Test Voltage::	AC 120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

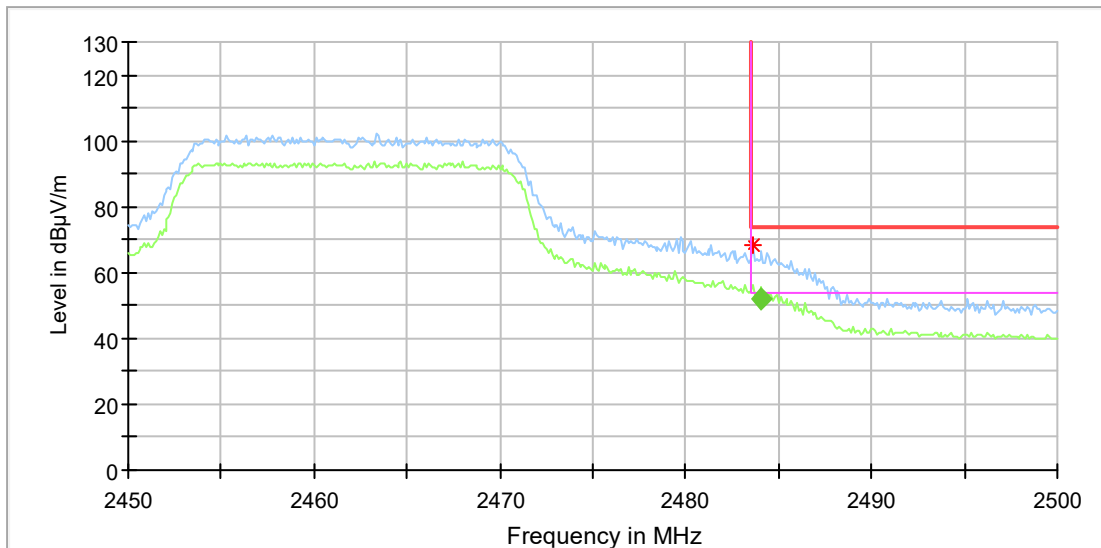
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.000000	---	50.64	54.00	3.36	100.0	V	253.0	7.0
2389.900000	64.43	---	74.00	9.57	100.0	V	231.0	7.0

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	Smart Temperature and Humidity Monitoring Switch
Model:	THR320D
Test Mode:	WIFI 2.4G_11n20_Ch11
Order No/Sample No:	168377937/A003284877-001
Test Voltage::	AC 120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

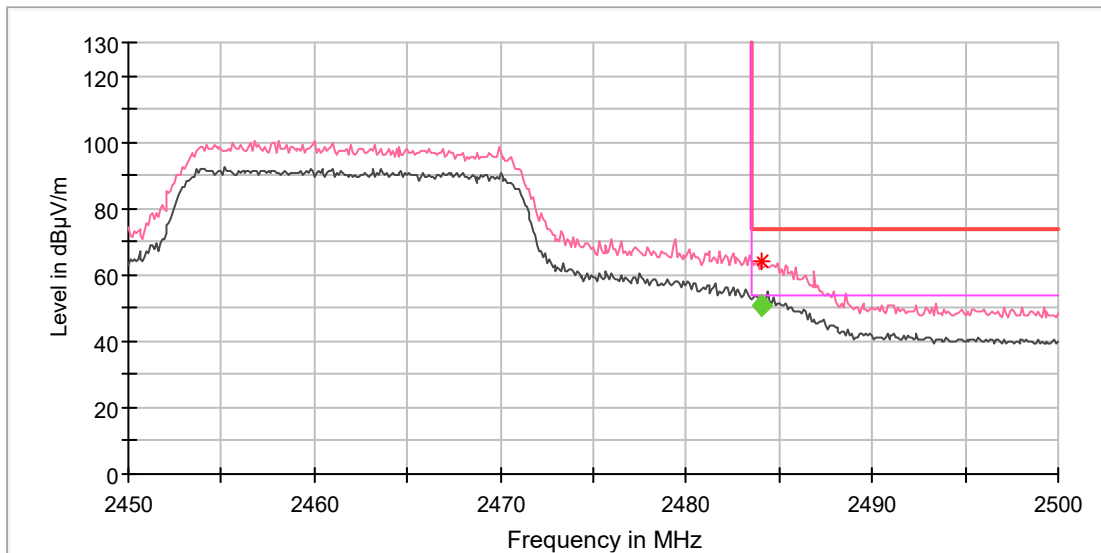
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.600000	68.05	---	74.00	5.95	100.0	H	162.0	7.4

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.012250	51.92	54.00	2.08	105.0	H	160.0	7.4

EUT Information

EUT Name: Smart Temperature and Humidity Monitoring Switch
 Model: THR320D
 Test Mode: WIFI 2.4G_11n20_Ch11
 Order No/Sample No: 168377937/A003284877-001
 Test Voltage:: AC 120V/60Hz
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

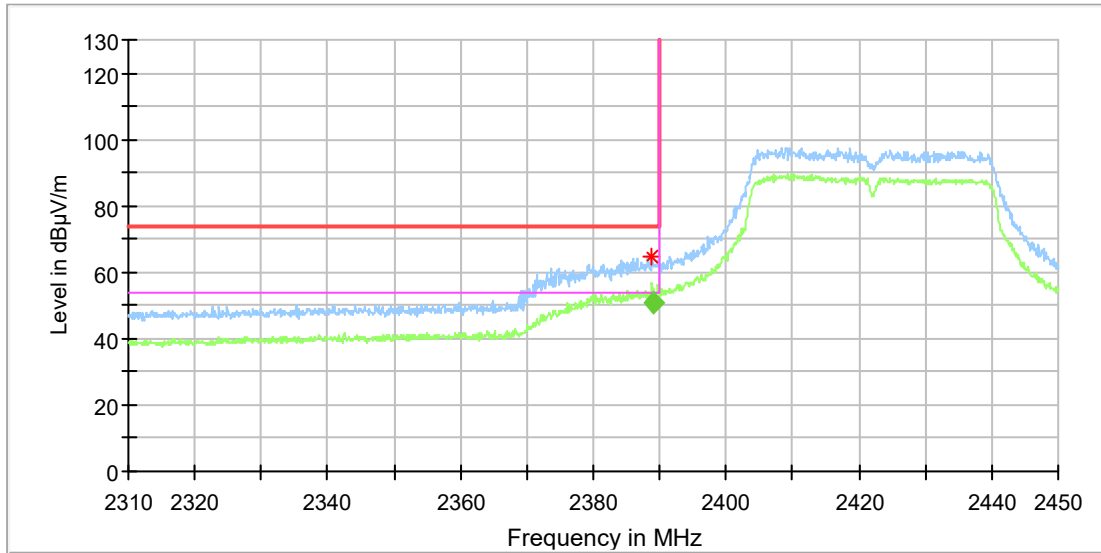
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.000000	64.05	---	74.00	9.95	100.0	V	239.0	7.4

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.010100	50.49	54.00	3.51	105.0	V	237.0	7.4

EUT Information

EUT Name:	Smart Temperature and Humidity Monitoring Switch
Model:	THR320D
Test Mode:	WIFI 2.4G_11n40_Ch3
Order No/Sample No:	168377937/A003284877-001
Test Voltage::	AC 120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

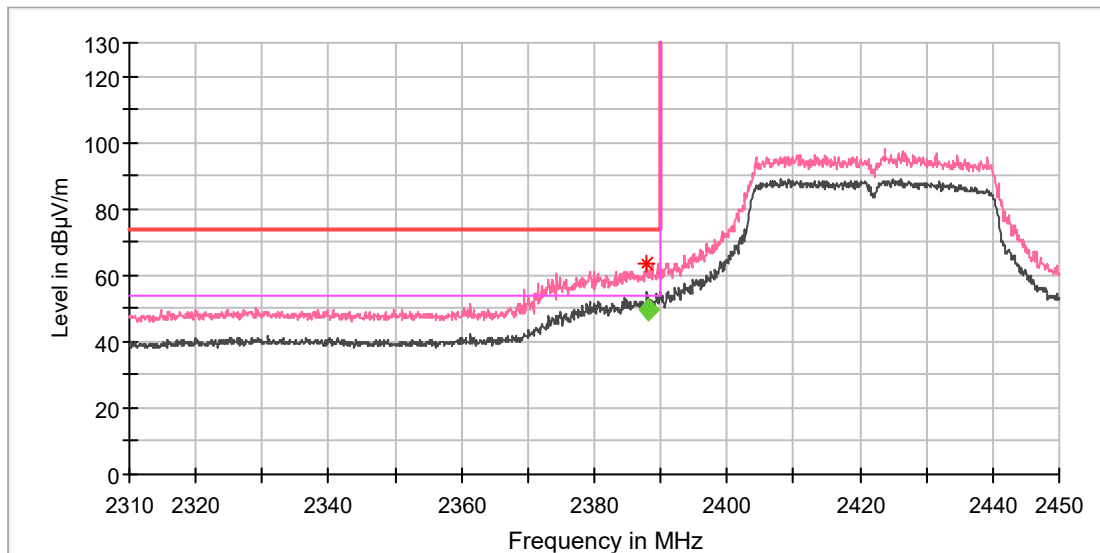
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.900000	64.87	---	74.00	9.13	100.0	H	168.0	7.0

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.063600	50.82	54.00	3.18	105.0	H	167.0	7.0

EUT Information

EUT Name:	Smart Temperature and Humidity Monitoring Switch
Model:	THR320D
Test Mode:	WIFI 2.4G_11n40_Ch3
Order No/Sample No:	168377937/A003284877-001
Test Voltage::	AC 120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

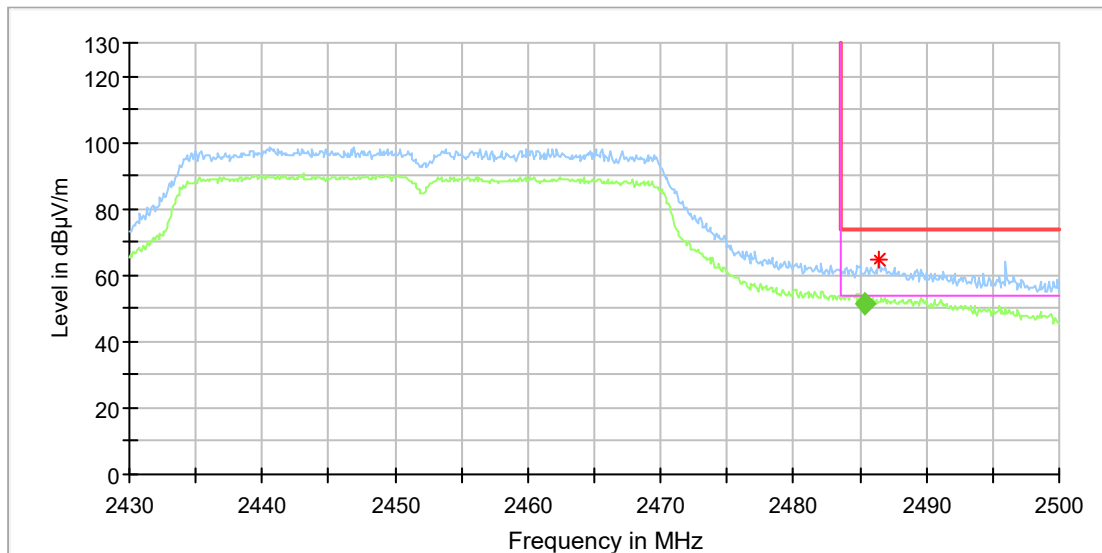
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2387.900000	63.48	---	74.00	10.52	100.0	V	230.0	7.0

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2388.244100	49.73	54.00	4.27	100.0	V	228.0	7.0

EUT Information

EUT Name:	Smart Temperature and Humidity Monitoring Switch
Model:	THR320D
Test Mode:	WIFI 2.4G_11n40_Ch9
Order No/Sample No:	168377937/A003284877-001
Test Voltage::	AC 120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

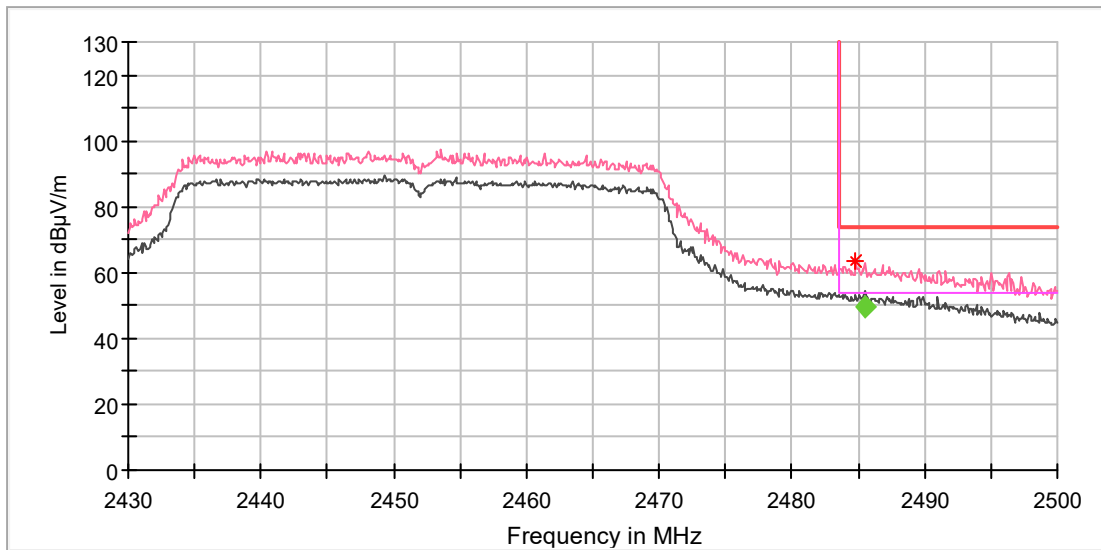
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2486.400000	64.99	---	74.00	9.01	100.0	H	157.0	7.4

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2485.336850	51.45	54.00	2.55	105.0	H	156.0	7.4

EUT Information

EUT Name: Smart Temperature and Humidity Monitoring Switch
 Model: THR320D
 Test Mode: WIFI 2.4G_11n40_Ch9
 Order No/Sample No: 168377937/A003284877-001
 Test Voltage:: AC 120V/60Hz
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.800000	63.33	---	74.00	10.67	100.0	V	257.0	7.4

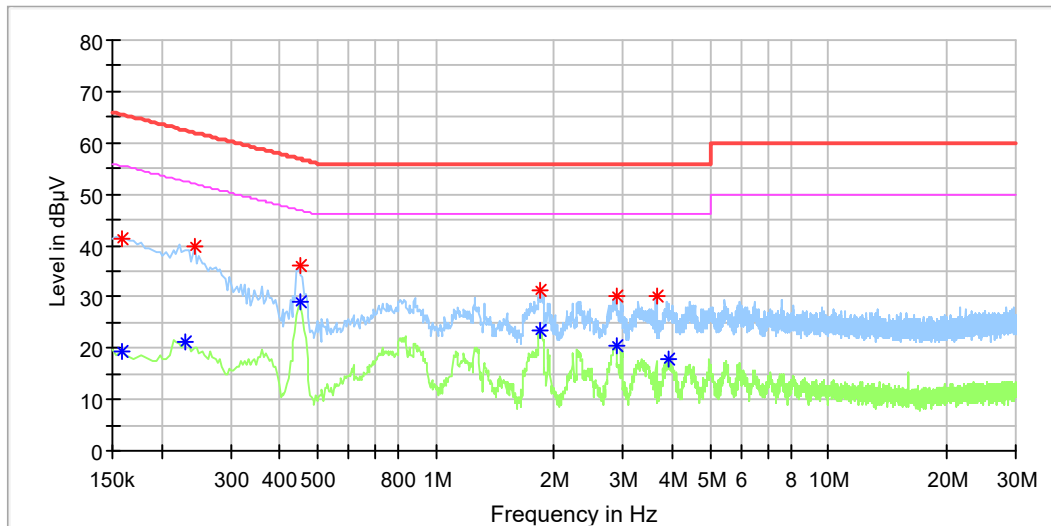
Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2485.542150	49.56	54.00	4.44	105.0	V	256.0	7.4

Appendix B.7: Test Results of Conducted Emission

EUT Information

EUT Name:	Smart Temperature and Humidity Monitoring Switch
Order No:	168377937 15
Model:	THR 320D
Test mode:	WIFI mode
Test Voltage:	AC 120V/60Hz
Test By:/Review By:	Steve Lan/Gary Chen
Tem./Hum./Pressure:	23.7°C/50.4%/101kPa
Remark:	SR1

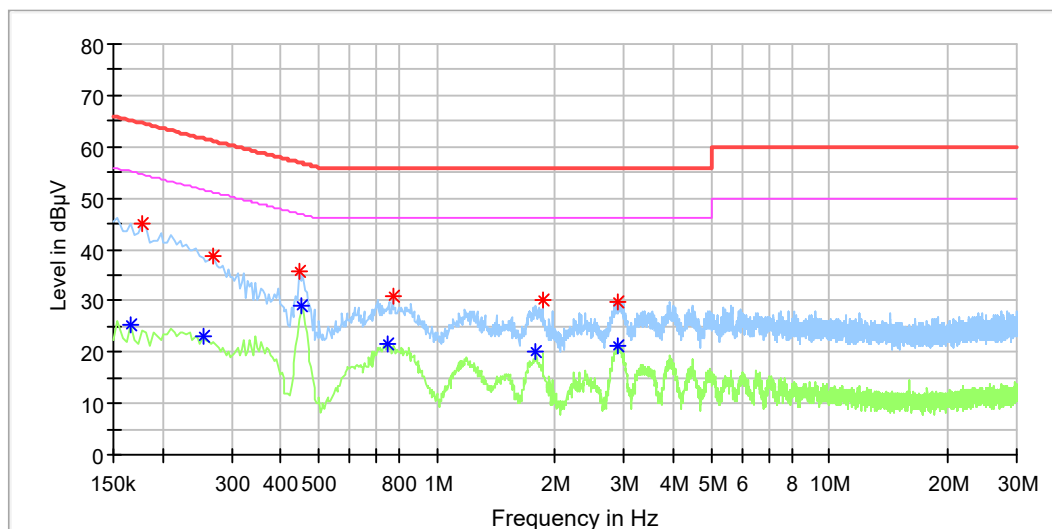


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.158000	---	19.45	55.57	36.12	L1	9.9
0.158000	41.38	---	65.57	24.19	L1	9.9
0.230000	---	21.31	52.45	31.14	L1	9.9
0.242000	39.75	---	62.03	22.28	L1	9.9
0.450000	35.96	---	56.88	20.92	L1	9.9
0.450000	---	29.01	46.88	17.86	L1	9.9
1.834000	31.12	---	56.00	24.88	L1	10.1
1.846000	---	23.44	46.00	22.56	L1	10.1
2.878000	---	20.59	46.00	25.41	L1	10.2
2.878000	30.23	---	56.00	25.77	L1	10.2
3.654000	30.04	---	56.00	25.96	L1	10.2
3.934000	---	17.96	46.00	28.04	L1	10.2

EUT Information

EUT Name: Smart Temperature and Humidity Monitoring Switch
 Order No: 168377937 15
 Model: THR 320D
 Test mode: WIFI mode
 Test Voltage: AC 120V/60Hz
 Test By:/Review By: Steve Lan/Gary Chen
 Tem./Hum./Pressure: 23.7°C/50.4%/101kPa
 Remark: SR1



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.166000	---	25.35	55.16	29.81	N	9.8
0.178000	45.10	---	64.58	19.48	N	9.8
0.254000	---	23.13	51.63	28.50	N	9.8
0.270000	38.83	---	61.12	22.29	N	9.8
0.446000	35.88	---	56.95	21.07	N	9.8
0.454000	---	28.98	46.80	17.82	N	9.8
0.746000	---	21.65	46.00	24.35	N	9.8
0.774000	30.75	---	56.00	25.25	N	9.8
1.790000	---	20.04	46.00	25.96	N	9.8
1.862000	29.97	---	56.00	26.03	N	9.8
2.886000	29.83	---	56.00	26.17	N	9.9
2.886000	---	21.30	46.00	24.70	N	9.9